

I/O-System — 750 and 753 Series

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- Highly versatile
- More than 500 modules available
- Functional safety
- Ex i

Section 5 ▶

I/O-System - 750 XTR Series

For demanding applications where the following are critical:

- Extreme temperature stability
- Immunity to interference and dielectric strength
- Vibration and shock resistance

Section 6 ► ► I/O-System — SPEEDWAY

- Uncompromising protection, even in the harshest environments outside the control cabinet
- Degree of protection: IP67
- Fully encapsulated

I/O-System — 750 and 753 Series — One System for Every Application

General Product Information

One System for Every Application

The WAGO-I/O-SYSTEM 750/753 is characterized by its universal application scope and extensive product portfolio. With more than 500 different modules, the versatility and flexibility is so great that virtually every requirement in a wide range of industries is covered.

Industrial Automation

The wide selection of I/O modules for various potential and signal forms, as well as specialty functions, makes it possible to economically wire sensors/actuators – even in safety-related applications.

Building Automation

The broad portfolio allows for flexible, cellar-to-ceiling solutions with conventional I/O modules, standardized industry-specific fieldbus protocols and subsystems for typical applications in lighting, shading, heating, ventilating and air conditioning (HVAC) and more.

Marine and Onshore/Offshore Automation

International approvals coupled with industry-specific features permit use in ship-building and other harsh sectors. Addressing industry- and operating environment-specific requirements has enabled use on marine diesels and in the EMC-sensitive area of a vessel's bridge. Because WAGO meets the marine industry's significantly greater requirements for immunity to interference or emission of interference and mechanical performance, WAGO I/O is well-suited to other industries.

Process Automation

Use even under the harshest environmental conditions is possible with special approvals. Potential hazardous location applications include oil and gas production, the chemical industry and power generation. The WAGO-I/O-SYSTEM can be installed in Zone 2/22 with its intrinsically safe I/O modules making it possible to connect sensors/actuators in Zones 1/21 and 0/20.

Maximum Fieldbus Independence

The system's modularity is also reflected in its support for numerous fieldbus systems and ETHERNET standards. Depending on the application, it is possible to choose between fieldbus couplers and communication modules for different protocols.

Easy to Use

The modular, rail-mounted module design permits easy, tool-free installation and straightforward modifications, such as system expansions. The straightforward design prevents installation errors. In addition, proven CAGE CLAMP® technology offers fast, vibration-proof and maintenance-free connections that are independent of operator skill. Depending on the I/O module's granularity, the field peripherals can be wired directly using 1-, 2-, 3- or 4-wire technology.

Worldwide Approvals

International approvals for building and industrial automation, as well as the process and shipbuilding industries guarantee worldwide use even under harsh operating conditions, e.g., ATEX, BR-Ex, IECEx, UL 508 and UL ANSI/ISA.























Extremely Compact

Our patented mechanical design leads to extremely compact I/O nodes. In fact, select I/O modules can accommodate up to 16 channels in a 12 mm (1/2") wide housing.

- Finely granular I/O modules enable customization of nodes
- Space-saving design allows high integration density and direct connection

Maximum Reliability and Ruggedness

The WAGO-I/O-SYSTEM is also designed for applications operating under the most demanding environmental conditions in accordance with the highest standards, e.g., those required in shipbuilding. The system is distinguished from other products that are solely intended for industrial use because of:

- Greatly increased vibration rating
- Significantly greater immunity to interference (ESD)
- Lower emission of interference
- Larger voltage fluctuation range
- Improved ruggedness for continuous operation in a temperature range near the limit

In addition, CAGE CLAMP® spring pressure connections ensure superior reliability. Integrated QA measures in the production process and 100 % function testing ensure consistent quality.

Clear Identification

Pullout group markers identify module functionality (integrated or as an option). Connector assignment and technical data are located on the side of the module. The WAGO WSB marker system also allows for module- and channel-related identification.

- Fieldbus-independent compatible with all standard fieldbus protocols & ETHERNET standards
- Flexible platform adapts to diverse applications and environments
- Tested and approved worldwide
- Wide range of accessories for marking and connection technology
- CAGE CLAMP® connection technology for vibration-proof, fast and maintenance-free connection

I/O-System — 750 and 753 Series

Versions

Pluggable connector



The pluggable connections of the WAGO-I/O-SYSTEM 753 allow quick and safe replacement. Optional coding pins prevent inserting the pluggable connector in the wrong I/O module. Replacing and connecting the I/O module requires no further action and eliminates possible errors – permanent wiring.

Alternatively, field wiring is possible via interface modules that can be connected to the I/O-System using a ribbon cable (see Configurations).

Extended temperature range



Industrial automation technology is typically operated in temperatures ranging from 0 °C to 55 °C. However, there are also applications that require an extended temperature range. For these applications, WAGO offers a line of WAGO-I/O-SYSTEM 750 products for temperatures ranging from -20 °C to +60 °C.

For extreme applications, where even this extended temperature range is not sufficient, the WAGO-I/O-SYSTEM 750 XTR is available.

Functional safety



In the European Union, the machinery directive defines the requirements for machine and system safety. This ensures a uniform standard for the protection of "life and limb" for people within a machine's operating area.

The required risk assessment is based on harmonized standards (e.g., EN 13849) that identifies existing risks and required risk reduction (SIL or PL quality). Based on the risk assessment, safety functionality can be implemented, e.g., by presence detection or protection zone violations using secure switches or light arrays to immediately shutdown the "risk". For this purpose, the safety signals are detected by the "yellow" safety modules and transmitted via "PROFIsafe" to the F-SPS for further processing. The result is then executed via a safe actuator (output module, controller, etc.).

The unique safety characteristic values of the WAGO modules facilitate calculation of the final safety function up to Cat. 4/PLe according to EN 13849, or SIL3 according to EN 62061 or IEC 61511.

The mixed operation of safe and conventional modules streamlines system configuration. For increased EMC immunity required according to the standard, WAGO offers compact filter modules for the power supply. Specific features of the power supply must be considered, which are described in detail in the corresponding manuals.

Use in hazardous locations



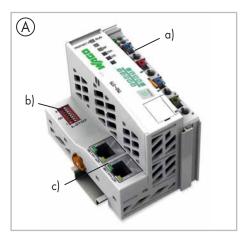
In many plants within the chemical or petrochemical industries, as well as production and process automation, machinery is operated that processes explosive materials including gas and combustible dust. This is why electrical equipment must be explosion-proof in order to avoid injuries to personnel and equipment damage.

The modules within the WAGO-I/O-SYSTEM 750 are designed for use in both non-potentially explosive and potentially explosive areas. The direct application of fieldbus technology in potentially explosive areas is typically resource-intensive. When used in hazardous areas of Zone 2/22, the WAGO-I/O-SYSTEM 750 offers a safe, easy and economical connection to the sensors and actuators of Zones 0/20 and 1/21. Then WAGO has also developed "blue" Ex-i I/O modules for these intrinsically safe applications, providing users with all the benefits of modern fieldbus technology integrated into a standard node. The WAGO-I/O-SYSTEM 750 is also approved for mining applications.



I/O-System – 750 and 753 Series

Interfaces and Configurations

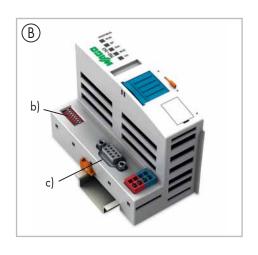


Housing design fieldbus coupler (A)

- Including supply module (a) to power downstream I/O modules
- Technical differences on the connection level.
 Optional address switch (b) and fieldbus interface (c)
- $W \times H^* \times L \text{ (mm)} 51 \times 65 \times 100 \text{ or}$
- W x H* x L (mm) 62 x 65 x 100

Housing design fieldbus coupler ECO (B)

- · Restriction on power supply and data width
- W x H* x L (mm) 50 x 65 x 97





Housing design 750 (C)

- 8 connection terminals (CAGE CLAMP®)
- W x H* x L (mm) 12 x 65 x 100

Housing design 753 (D)

- Pluggable connector
- 8 connection terminals (CAGE CLAMP $^{\circ}$)
- W x H* x L (mm) 12 x 65 x 100



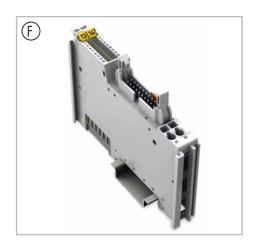


Housing design 750 (E)

- 16 connection terminals (CAGE CLAMP® S)
- W x H* x L (mm) 12 x 65 x 100

Housing design 750 (F)

- For time-saving wiring between I/O-System and interface modules
- Ribbon cable connector for connection to 289 Series Interface Modules and JUMPFLEX® Interface Adapter
- W x H* x L (mm) 12 x 73 x 100





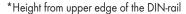
Housing design double width (G)

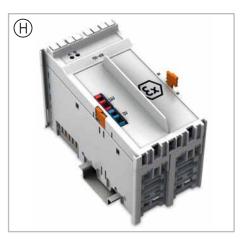
Some modules are integrated into a double housing to address specific technological needs. Despite utilizing the same standardized housing, these modules are twice as wide.

• W x H* x L (mm) 24 x 65 x 100

Special housing design (H)

Some modules are integrated into a specialized housing with a specific width and pluggable connectors. The dimensions are specified on the respective catalog page.



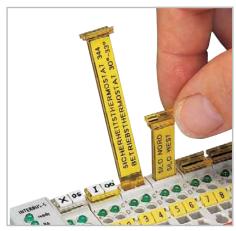


I/O-System – 750 and 753 Series

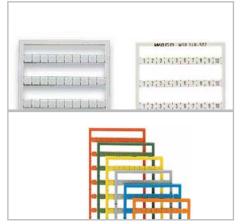
Markings and Mounting Accessories



Transparent group marker carriers to indicate module type by color.



Removable group marker carriers are available for all 750 and 753 Series I/O modules with a maximum of four LEDs, as well as all fieldbus couplers with a supply module.



Miniature WSB quick marking system, blank, pre-marked and colored. Suitable for all 750 and 753 Series I/O modules.



Marker carrier for an individual I/O module. Suitable for all 750 and 753 Series I/O modules. The marker carrier can be placed in the upper, miniature WSB carrier plate.



Marker carriers for an I/O node. Both carrier models (750-106 and 750-107) permit continuous marking regardless of the I/O module housing used.



Interface modules for system wiring



Interface cables



I/O-System – 750 and 753 Series

Application and Installation Instructions

Power supply

The fieldbus coupler always powers the internal electronics' power supply. The field-side power supply is electrically isolated via the supply module on the fieldbus coupler or a separate potential supply module. The division enables a separate supply for sensors and actuators. Snapping I/O modules together automatically routes the supply voltages (system power supply 5 VDC via the data contacts and field supply via the optional power jumper contacts). Supply modules with diagnostics enable additional power supply monitoring. This ensures a flexible, user-specific supply design for a station.

The current supply to the electronics is limited by a maximum value. This value depends on the fieldbus coupler used. If the sum of the internal current demand of all the I/O modules exceeds this value, an additional bus supply module is necessary. Even in this case, the power supply to the field-side supply of 10 A may not be exceeded. However, different power supply modules allow a new power supply, formation of potential groups and the implementation of emergency stops.

Interference-free in safety-related applications

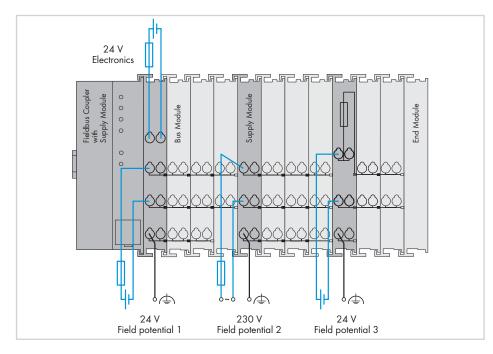
To safely and easily perform cost-effective, centralized deactivation of complete actuator groups, the actuator's power supply can be switched off using a safety switching device. This can either be performed for each individual actuator or by turning off the power supply to a group of control outputs.

In the event of failure, ensure that no interference from other current or power circuits occurs — even when the control voltage is switched off — so the defined safety function properties (logic and time response) remain unchanged.

Some modules are designed to provide interference-free safety functionality. These modules comply with safety requirements up to Category 4 of DIN EN ISO 13849-1:2007. The safety category and performance level depend solely on the safety components and their wiring.

Attention!

Interference-free WAGO I/O modules have no active impact on the safety function – they are not an active part of the safety application and are not a substitute for the safety switching device! When using the components in safety functions, the corresponding notes must be observed in the relevant manual.

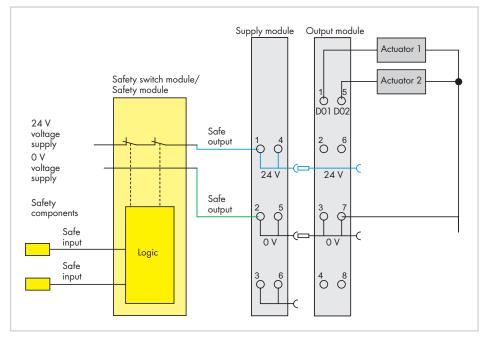


Notes

Additional steps must be must be implemented based on where the I/O-System is installed:

- As part of shipbuilding or in the onshore/offshore sector, specific power and field-side power supply filters must be provided (750-624/626).
- As part of operating intrinsically safe Ex i modules, use of a specific supply module is required (750-625). In addition, specific power and field-side power supply filters must be provided (750-624/626).
- For the 24 VDC power supply of electronics and field, PELV/SELV power supply units are recommended. As part of a safety-related application, they are mandatory.
- The mixed operation of safe and conventional modules streamlines system configuration. For increased EMC immunity required according to the standard, WAGO offers compact filter modules for the power supply.

Please refer to the manual for details about the power supply's design.

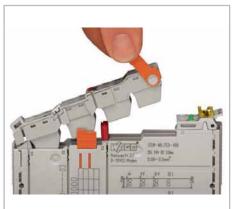


Example: Two-channel, double-pole power supply disconnection

I/O-System – 750 and 753 Series Application and Installation Instructions



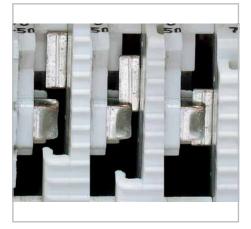
Attachment/release on the mounting rail



Releasing the pluggable connector



Optional protection against mismating of pluggable connectors via coding elements



Secure, automatic connection of the power supply by self-cleaning blade contacts

Notice:

Within select I/O modules, not all power jumper contacts are made! An I/O module with three power jumper contacts (e.g., 2-channel digital input) cannot be snapped into place behind an I/O module in which not every contact is made.

To increase electromagnetic compatibility (EMC), some components are connected to the DIN-rail by a discharge contact. The DIN-rail must always have a low-resistance connection to the ground potential.



Wide range of accessories for EMC-compliant installation including shield connection



Secure, automatic connection of the data and electronics power supply by gold-plated pressure contacts



Securing the cable to the connector



Service interface for configuring the fieldbus coupler. Connectivity via configuration cable or radio adapter



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I/O-System -750 and 753 Series

Item Number Keys

Explanation of the components for the item number key

750 Series: Standard 753 Series: Pluggable connector Item No.: 75x-yyzz 01zz: Marker 03zz: Fieldbus coupler zz: Consecutive number 16 connection points or ribbon cables 1 yzz: y4zz: 00 ... 49 = Digital input 50 ... 99 = Analog input 04: Counter y5zz: Output 00 ... 49 = Digital output 50 ... 99 = Analog input y6zz: Function / technology / communication / system module Oz: Power supply, potential duplication, end module 1z: Power supply, potential duplication, separation modules 2z: Power supply, bus extension, filter, separation modules 3z: Distance and angle measurement, DC drive controller, counter 4z: Communication (building), radio, RTC, vibration monitoring 5z: Serial interfaces, communication 6z: Functional safety .../000-001: PROFIsafe V1.3 .../000-002: PROFIsafe V2 .../000-003: PROFIsafe V2 iPar 7z: Stepper 09zz: Accessories .../025-000: Extended temperature range -20 $^{\circ}$ C ... +60 $^{\circ}$ C .../000-800: Interference-free .../040-000: 750 XTR Series, see Section 5

I/O-System — 750 and 753 Series Standards and Rated Conditions

Operating voltage	24 VDC (-25 % +30 %)*; *for all shipbuilding-certified fieldbus couplers and I/O module
Operating temperature	0 °C +55 °C
Operating temperature for versions with an extended temperature range	-20 °C +60 °C
Storage temperature	-25 °C +85 °C
Storage temperature for versions with an extended temperature range	-40 °C +85 °C
Relative humidity (without condensation)	95 %
Operating altitude	without temperature derating: 0 m 2000 m; with temperature derating: 2000 m 5000 m (0.5 K/100 m); max.: 5000 m
Degree of contamination	II acc. to IEC 61131-2
Vibration resistance	0.5g (4g for all shipbuilding-certified fieldbus couplers and I/O modules) acc. to IEC 60068-2-6
Shock resistance	15g acc. to IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2 / marine applications
EMC emission of interference	acc. to EN 61000-6-3 / EN 61000-6-4 / marine applications
Protection type	IP20
Mounting position	any
Type of mounting	on DIN 35 rail
Housing material	Polycarbonate, polyamide 6.6
Stress due to contaminants	acc. to IEC 60068-2-42 and IEC 60068-2-43
Maximum contaminant concentration with a relative humidity < 75 %	SO2 ≤ 25 ppm; H2S ≤ 10 ppm
Connection technology	CAGE CLAMP®
Conductor cross-section; stripped lengths for standard I/O modules and fieldbus couplers: 753 Series I/O Modules: ECO Fieldbus Couplers:	0.08 mm ² 2.5 mm ² /28 14 AWG; 8 9 mm/0.33 in. 0.08 mm ² 2.5 mm ² /28 14 AWG; 9 10 mm/0.37 in. 0.08 mm ² 1.5 mm ² /28 16 AWG; 5 6 mm/0.22 in.
Connection technology	CAGE CLAMP® S
Conductor cross-section; stripped lengths for I/O modules with 16 connecting terminals:	solid: 0.08 mm ² 1.5 mm ² /28 16 AWG, fine-stranded: 0.25 mm ² 1.5 mm ² /22 16 AWG; 8 9 mm/0.33 in.
Current via power jumper contacts	max. 10 A



Fieldbus Couplers

Housing Design I with System Power Supply		
Dimensions (mm) W x H x L	51 x 65 x 100 (Height from upper edge of the DIN-rail)	
Wire connection	CAGE CLAMP®	
Cross sections	0.08 mm ² 2.5 mm ² / 28 14 AWG	
Strip lengths	8 9 mm / 0.33 in.	



Housing Design II with System Power Supply		
Dimensions (mm) W x H x L	62 x 65 x 100 (Height from upper edge of the DIN-rail)	



Housing Design without System Power Supply		
Dimensions (mm) W x H x L	50 x 65 x 97 (Height from upper edge of the DIN-rail)	
Wire connection	CAGE CLAMP®	
Cross sections	0.08 mm ² 1.5 mm ² / 28 14 AWG	
Strip lengths	5 6 mm / 0.22 in.	



Housing Design ECO	
Dimensions (mm) W x H x L	50 x 65 x 97 (Height from upper edge of the DIN-rail)
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / 28 16 AWG
Strip lengths	5 6 mm / 0.22 in.



PROFINET IO Fieldbus Coupler

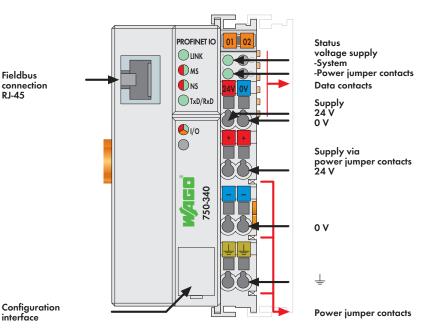
Fieldbus

interface

connection RJ-45

10/100 Mbit/s; digital and analog signals





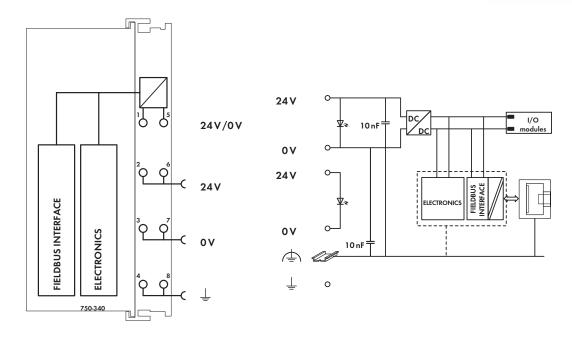
This fieldbus coupler connects the WAGO-I/O-SYSTEM as a slave to the PROFINET IO Industrial ETHERNET standard for automation. The fieldbus coupler supports all WAGO-I/O-SYSTEM modules.

The coupler automatically configures, creating a local process image which may include analog, digital, or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

The fieldbus coupler is integrated into the application as a PROFINET IO device.

Description		Item No.	Pack. Unit
PROFINET IO 100	MBit	750-340	1
A		I. M	Pack.
Accessories		Item No.	Unit
Miniature WSB Q	uick marking syste	em	
Communication	plain	248-501	5
Legenmone	with marking	see Section 11	
SHADOWSKIN.			
Approvals			
Conformity marking		(€	
Korea Certification		C	
ւ®տ UL 508			
□ TÜV 07 ATEX 55	4086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C Dc	
		ure 0 °C +60 °C	
IECEx TUN 09.000	1 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
ъ		Ex tc IIIC T135°C Dc	
Permissib	le ambient temperat	ure 0 °C +60 °C	

System Data	
No. of couplers connected to Master	limited by PROFINET specification
Transmission medium	Twisted Pair S-UTP 100 Ω cat. 5
Max. length of fieldbus segment	100 m between hub station and 750-340;
	max. length of network limited by
	PROFINET specification
Baud rate	10/100 Mbit/s
Buscoupler connection	RJ-45
Protocols	PROFINET RT V2.0
	(RT Class 1);
	Conformance Class A (DCP, UDP);
	HTTP



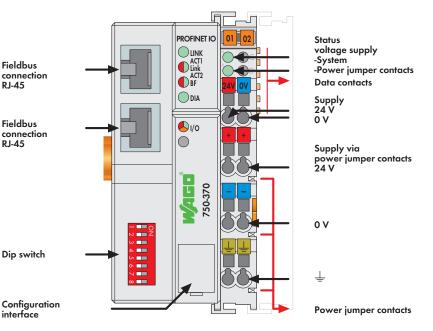
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	179.5 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4



PROFINET IO Fieldbus Coupler

2-port; 100 Mbit/s; digital and analog signals





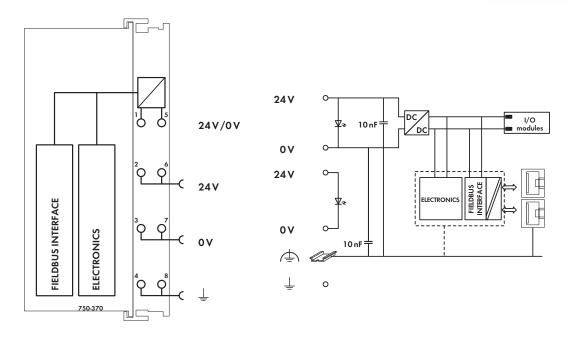
This fieldbus coupler connects to the WAGO-I/O-SYSTEM as a slave of the PROFINET IO, the open Industrial ETHERNET standard for automation. The fieldbus coupler supports all I/O modules. The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

This buscoupler can integrate into the application as a PROFINET IO device. The buscoupler features an integrated 2-port switch, allowing easy line structure creation without requiring any additional network components. The device name can be assigned via DCP protocol or be adjusted by a DIP switch if the protocol is not supported by the control systems.

	Item No.	Pack. Unit
MBit 2-port	750-370	1
	Item No.	Pack. Unit
uick marking syste	em	
plain	248-501	5
with marking	see Section 11	
	C€	
	C	
2.01	Class I, Div. 2, Grp. ABCD, T4	
54086 X	I M2 Ex d I Mb,	
	II 3 G Ex nA IIC T4 Gc,	
	II 3 D Ex tc IIIC T135°C Dc	
le ambient temperati	ure 0 °C +60 °C	
1 X	Ex d I Mb,	
	Ex nA IIC T4 Gc,	
	Ex to IIIC T135°C Do	
le ambient temperatu	ure 0 °C +60 °C	
le ambient temperatu	ure 0 °C +60 °C	
	uick marking syste plain with marking 2.01 4086 X	Item No. Uick marking system plain 248-501 with marking see Section 11 CE 2.01 Class I, Div. 2, Grp. ABCD, T4 34086 X I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc Ile ambient temperature 0 °C +60 °C I X Ex d I Mb,

System Data	
No. of couplers connected to Master	limited by PROFINET specification
Transmission medium	Twisted Pair S-UTP 100 Ω cat. 5
Max. length of fieldbus segment	100 m between switch and 750-370; max.
	length of network limited by PROFINET
	specification
Baud rate	10/100 Mbit/s
Buscoupler connection	2 x RJ-45
Protocols	PROFINET IO
	(RT Class 1);
	Conformance Class B (DCP, SNMP, LLDP); HTTP





General Specifications

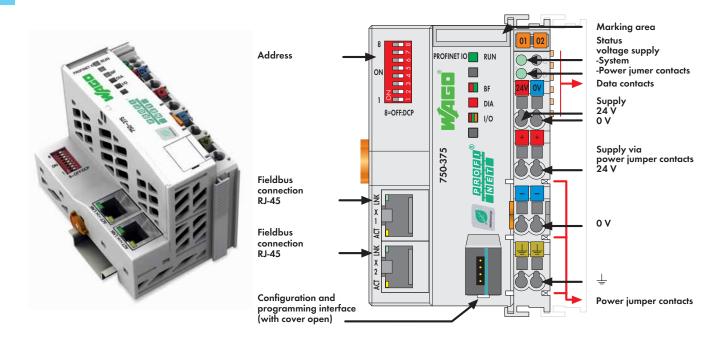
Technical Data	
Number of I/O modules	64
with bus extension	128
Max. input process image	320 bytes
Max. output process image	320 bytes
Configuration	via PC
Power supply	24 V DC (-15 % +20 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	300 mA
Total current for I/O modules (5 V)	1700 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-15 % +20 %)
Current via power jumper contacts (max.)	10 A DC

Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	189.5 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3



PROFINET IO advanced Fielbus Coupler

2-port switch; 100 Mbit/s; digital, analog and complex signals



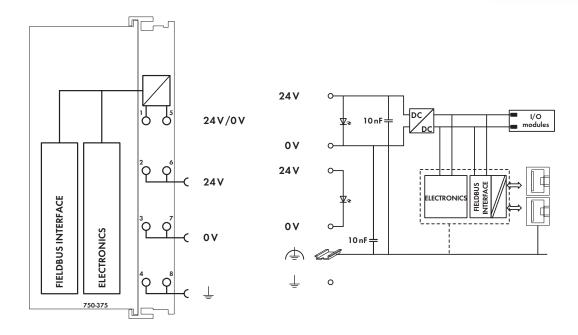
The 750-375 Fieldbus Coupler connects the WAGO-I/O-SYSTEM 750 to PROFINET IO (open, real-time industrial ETHERNET automation standard). The coupler identifies the connected I/O modules and creates local process images for maximum two IO controllers and one IO supervisor according to preset configurations. The process images may include a mixed arrangement of analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

The fieldbus coupler operates as an IO device in the network. It features an integrated 2-port switch, simplifying the creation of a line structure without additional network components.

The device name can be assigned via DCP protocol or set via DIP switch.

Description		_	Item No.	Pack. Unit
PROFINET IO ad	v. 2-Port		750-375	1
PROFINET IO ad	v. 2-Port/T		750-375/025-000	1
Extended temperat	rure range: -20 °C +6	o °C		
Accessories			Item No.	Pack. Unit
Miniature WSB C	Quick marking system			
Communical Communication	plain		248-501	5
Legenment	with marking		see Section 11	
SALECTICAL COLOR				
Approvals				
Conformity marking	g	C€		
Marine applications	(versions upon request)	GL		
(®)∞ UL 508				

limited by PROFINET specification
Twisted Pair S-UTP 100 Ω cat. 5
100 m between hub station and 750-375;
max. length of network limited by
PROFINET specification
10 Mbit/s (ETHERNET protocols),
100 Mbit/s full duplex (PROFINET IO)
100Base-TX
2 x RJ-45
V2.2 (conformance class C, pending)



General Specifications

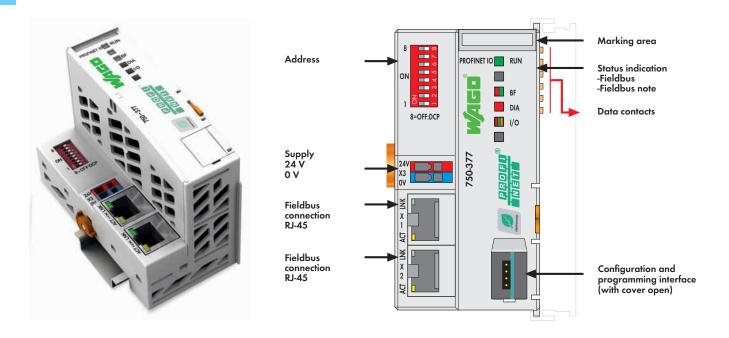
250 512 bytes 512 bytes 512 bytes 75 PC Integrated 2-port switch; Auto-negotiation, Auto-MDIX; sochronous real-time communication pending); Fransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device Fopology detection / LLDP,
512 bytes via PC ntegrated 2-port switch; Auto-negotiation, Auto-MDIX; sochronous real-time communication pending); fransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
via PC ntegrated 2-port switch; Auto-negotiation, Auto-MDIX; sochronous real-time communication (pending); fransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
ntegrated 2-port switch; Auto-negotiation, Auto-MDIX; sochronous real-time communication pending); fransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
Auto-negotiation, Auto-MDIX; sochronous real-time communication pending); fransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
sochronous real-time communication pending); [ransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
pending); Fransmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
Transmission clock: 1 ms (RT), 1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
1, 2, 4 ms (IRT); Device replacement without programming ool; Shared device
Device replacement without programming ool; Shared device
ool; Shared device
•
Tanalagy dataction / LIDP
opology delection / LLDI,
Network diagnostics / SNMP / MIB-2,
media redundancy / MRP (pending),
Web server / HTTP
PROFIsafe V2, PROFIenergy V1.0
/endor ID: 0x011D;
Device ID: 0x02EE;
Coupler ID: 0x01000177
24 V DC (-25 % +30 %)
500 mA
90 %
450 mA
1700 mA
500 V system/supply

Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	62 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	150.3 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications



PROFINET IO advanced ECO Fielbus Coupler

2-port switch; 100 Mbit/s; digital, analog and complex signals



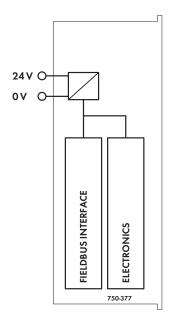
The 750-377 Fieldbus Coupler connects the WAGO-I/O-SYSTEM 750 to PROFINET IO (open, real-time industrial ETHERNET automation standard). The coupler identifies the connected I/O modules and creates local process images for one IO controller and one IO supervisor according to preset configurations. The process images may include a mixed arrangement of analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

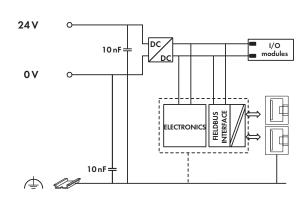
The fieldbus coupler operates as an IO device in the network. It features an integrated 2-port switch, simplifying the creation of a line structure without additional network components.

The device name can be assigned via DCP protocol or set via DIP switch.

Description			Item No.	Pack. Unit
PROFINET IO ac	lv. ECO 2-Port		750-377	1
PROFINET IO ac	lv. ECO 2-Port/T		750-377/025-000	1
Extended tempera	ture range: -20 °C	+60 °C		
				Pack.
Accessories			Item No.	Unit
Miniature WSB	Quick marking syste	m		
	plain		248-501	5
Lecture	with marking		see Section 11	
CHIEF THE STREET				
Approvals				
Conformity markin	ng	CE		
Marine application	s (versions upon request) GL		
.®∞ UL 508				

System Data	
No. of couplers connected to Master	limited by PROFINET specification
Transmission medium	Twisted Pair S-UTP 100 Ω cat. 5
Max. length of fieldbus segment	100 m between hub station and 750-377;
	max. length of network limited by
	PROFINET specification
Baud rate	10 Mbit/s (ETHERNET protocols),
	100 Mbit/s full duplex (PROFINET IO)
Transmission method	100Base-TX
Buscoupler connection	2 x RJ-45
PROFINET IO standard	V2.2 (conformance class C, pending)





General Specifications

Max. output process image 2 Configuration v PROFINET IO features Ir Is Is If If In	56 bytes 56 bytes a PC tegrated 2-port switch; uto-negotiation, Auto-MDIX; ochronous real-time communication pending); ansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmir polopology detection / LLDP, letwork diagnostics / SNMP / MIB-2,
Configuration v PROFINET IO features Ir Is Is If	a PC tegrated 2-port switch; uto-negotiation, Auto-MDIX; ochronous real-time communication pending); ansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmination popology detection / LLDP,
PROFINET IO features In A Is Is Is It Is Is It I	tegrated 2-port switch; uto-negotiation, Auto-MDIX; ochronous real-time communication bending); ansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmin bol opology detection / LLDP,
A Is	uto-negotiation, Auto-MDIX; ochronous real-time communication pending); ansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmin pology detection / LLDP,
Is (I) Ti 1 C to Protocols Ti	ochronous real-time communication pending); cansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmin tol opology detection / LLDP,
(I) Ti 1 C to Protocols Ti	pending); ansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmin tol opology detection / LLDP,
Ti Ti C E tr Protocols Ti	ansmission clock: 1 ms (RT), , 2, 4 ms (IRT); evice replacement without programmin ool opology detection / LLDP,
Protocols To to the transfer of the transfer	, 2, 4 ms (IRT); evice replacement without programmin tol opology detection / LLDP,
Protocols To to the transfer of the transfer	, 2, 4 ms (IRT); evice replacement without programmin tol opology detection / LLDP,
troportion to the protocols To the protocols To the protocols to the protocol	pology detection / LLDP,
Protocols T. N.	opology detection / LLDP,
n V	
n V	letwork diagnostics / SNMP / MIB-2,
V	
	edia redundancy / MRP (pending),
Profiles supported P	Veb server / HTTP
	ROFIsafe V2, PROFIenergy V1.0
ID code V	endor ID: 0x011D;
D	evice ID: 0x02EE;
C	oupler ID: 0x01000179
Power supply 2	4 V DC (-25 % +30 %)
Input current typ. at rated load (24 V) 2	80 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V) 9	0 %
Internal current consumption (5 V)	50 mA
Total current for I/O modules (5 V) 7	00 mA
Isolation 5	00 V system/supply

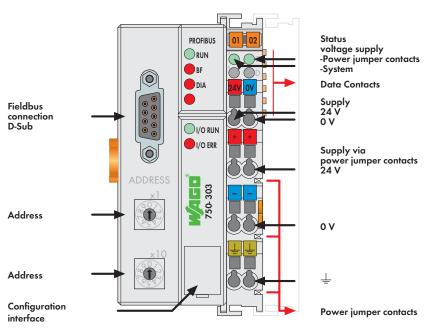
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 14
	5 6 mm / 0.22 in
Strip lengths	5 6 mm / 0.22 in 50 x 65 x 97
Dimensions (mm) W x H x L	
NAZ + 1 +	Height from upper-edge of DIN 35 rail
Weight	107.1 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications



PROFIBUS DP/FMS Fieldbus Coupler

12 Mbaud; digital and analog signals





This bus coupler connects the WAGO-I/O-SYSTEM as a slave to the PROFIBUS field bus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

PROFIBUS stores the process image in the corresponding Master control (PLC, PC or NC).

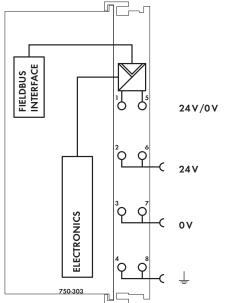
The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the PROFIBUS fieldbus to the PLC, PC or NC for further processing, and received from the field via PROFIBUS.

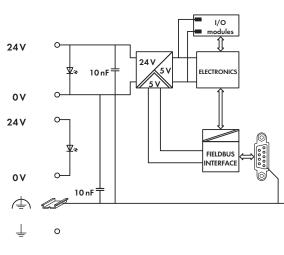
The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

When implementing new installations, please consider 750-333 PROFIBUS DP fieldbus coupler with extended functions. Notice: GSD files required!

Description		Item No.	Pack. Unit
PROFIBUS DP/FA	AS 12 MBd	750-303	1
Accessories		Item No.	Pack. Unit
GSD files	Download: www.	wago.com	
Miniature WSB G	uick marking syste	m	
Commence 2	plain	248-501	5
Leganone and	with marking	see Section 11	
444,000,000			
Standards an	d Approvals		
Standard		EN 50170	
Certification		PNO	
Conformity marking	3	C€	
Korea Certification		C	
Marine application	s	ABS, BV, DNV, GL, KR, LR,	nkk, prs, rina
® UL 508			
® ANSI/ISA 12.	12.01	Class I, Div. 2, Grp. ABCD	, T4
□ TÜV 07 ATEX 5:	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C D	С
	ole ambient temperatu	re 0 °C +60 °C	
IECEx TUN 09.000	01 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex tc IIIC T135°C Dc	
Permissib	ole ambient temperatu	re 0 °C +60 °C	

System Data	
No. of couplers connected to Master	96 with repeater
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Cu cable acc. to EN 50170
Max. length of fieldbus segment	100 m 1200 m
	(depends on baud rate/cable)
Baud rate	9.6 Kbaud 12 Mbaud
Transmission time	typ. 1 ms (10 couplers; 32 digital I/Os pe coupler at 12 Mbaud) max. 3.3 ms
Buscoupler connection	1 x D-Sub 9; socket





echnical Data	
Number of I/O modules	64
Max. input process image	128 bytes
Max. output process image	128 bytes
	up version 05xx, max. 64 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

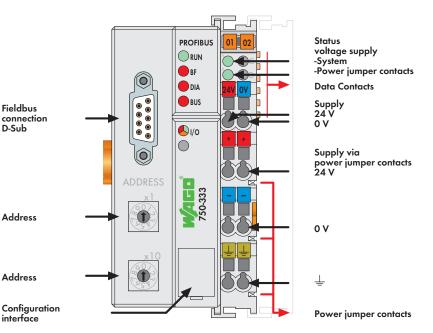
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	185.2 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



PROFIBUS DP/V1 Fieldbus Coupler

12 Mbaud; digital and analog signals





This buscoupler interfaces the I/O modules of the WAGO-I/O-SYSTEM to PROFIBUS DP.

When initializing, the buscoupler determines the module structure of the node, to create the process image in PROFIBUS. In order to optimize addresses, the I/O modules with a bit width smaller than 8 are grouped in one byte.

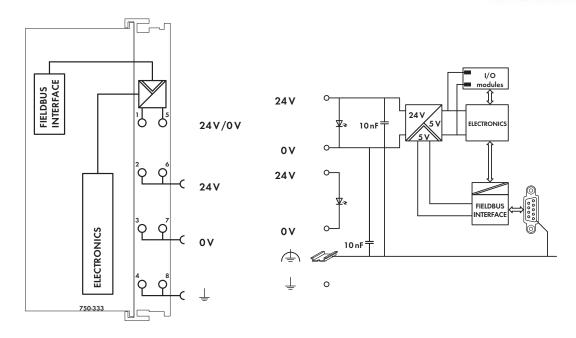
Notice: GSD files required

It is furthermore possible to deactive I/O modules and to modify the image of the node according to the connected signals without having to modify the existing application.

The diagnosis concept is based on diagnostics according to the EN 50170 standard. Therefore the programming of modules is not necessary to interpret the diagnostic information from each manufacturer.

Description		Item No.	Pack. Unit
PROFIBUS DP/V	1 12MBd	750-333	1
PROFIBUS DP/V	1/T	750-333/025-000	1
Extended temperat	ure range: -20 °C +6	0 °C	
Accessories		Item No.	Pack. Unit
GSD files	Download: www.wa	igo.com	
Miniature WSB C	Quick marking system		
Comment !	plain	248-501	5
Legensen	with marking	see Section 11	
-Hard Mileston			
Standards an	d Approvals		
Standard		EN 50170	
Conformity marking	9	C€	
Korea Certification			
Marine applications	(versions upon request)	ABS, BV, DNV, GL, KR, LR, NK	(K, PRS, RIN
.® UL 508			
ூங ANSI/ISA 12.		Class I, Div. 2, Grp. ABCD, Ta	1
TÜV 12.1297 X (B		Ex nA IIC T4 Gc	
© TÜV 07 ATEX 5	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C Dc	
	ole ambient temperature	0 °C +60 °C	
IECEx TUN 09.000	01 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex tc IIIC T135°C Dc	
Permissik	ole ambient temperature	0 °C +60 °C	

System Data	
No. of couplers connected to Master	96 with repeater
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Cu cable acc. to EN 50170
Max. length of fieldbus segment	100 m 1200 m
	(depends on baud rate/cable)
Baud rate	9.6 Kbaud 12 Mbaud
Transmission time	typ. 1 ms (10 couplers; 32 digital I/Os
	per coupler at 12 Mbaud) max. 3.3 ms
Buscoupler connection	1 x D-Sub 9; socket



1 1 110	40
Number of I/O modules	63
Max. input process image	244 bytes
Max. output process image	244 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	200 mA
Total current for I/O modules (5 V)	1800 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	183.1 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications

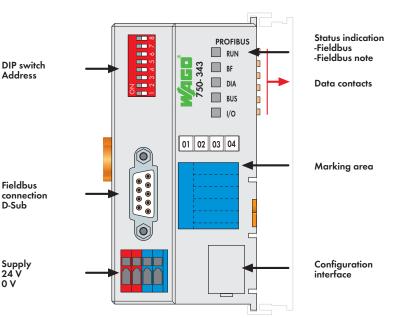




PROFIBUS DP ECO Fieldbus Coupler

12 Mbaud; digital and analog signals





The ECO fieldbus coupler is designed for applications with a reduced scale I/O requirement. Using digital only process data or small amounts of analogs, while retaining all of the choice that's offered by the Series 750 I/O.

Fieldbus

Supply 24 V 0 V

The coupler has an integrated supply terminal for the system voltage. The field power jumper contacts are supplied via a separate supply module.

When initializing, the buscoupler determines the module structure of the node, to create the process image in PROFIBUS. In order to optimize addresses, the I/O modules with a bit width smaller than 8 are grouped in one byte.

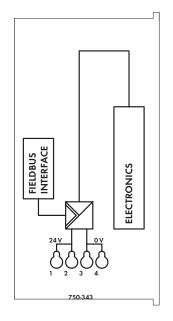
Notice: GSD files required

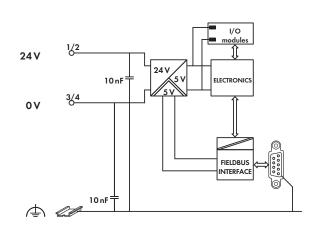
It is furthermore possible to deactive I/O modules and to modify the image of the node according to the connected signals without having to modify the existing application.

The diagnosis concept is based on diagnostics according to the EN 50170 standard. Therefore the programming of modules is not necessary to interpret the diagnostic information from each manufacturer.

Description		Item No.	Pack. Unit
PROFIBUS DP ECO	12 MBd	750-343	1
Accessories		Item No.	Pack. Unit
GSD files	Download: www.v	wago.com	
Miniature WSB Qu			
Community)	plain	248-501	5
Localitation	with marking	see Section 11	
CHARLEST CO.			
Standards and	Approvals		
Standard		EN 50170	
Conformity marking		C€	
Korea Certification			
Marine applications		ABS, BV, DNV, GL, KR, LR, NKK	C, PRS, RINA
@∞ UL 508			
® ANSI/ISA 12.12		Class I, Div. 2, Grp. ABCD, T4	
TÜV 12.1297 X (Bro	•	Ex nA IIC T4 Gc	
© TÜV 07 ATEX 55₄	1086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C Dc	
	e ambient temperatu		
IECEx TUN 09.0001	Χ	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex tc IIIC T135°C Dc	
Permissible	e ambient temperatu	re 0 °C +60 °C	

System Data	
No. of couplers connected to Master	125 with repeater
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Cu cable acc. to EN 50170
Max. length of fieldbus segment	100 m 1200 m
	(depends on baud rate/cable)
Baud rate	9.6 Kbaud 12 Mbaud
Transmission time	typ. 1 ms (10 couplers; 32 digital I/Os
	per coupler at 12 Mbaud) max. 3.3 ms
Buscoupler connection	1 x D-Sub 9; socket





Technical Data	63
Number of I/O modules	
Max. input process image	32 bytes
Max. output process image	32 bytes
Configuration	via PC or PLC
Power supply	24 VDC (-25 % +30 %)
Input current typ. at rated load (24 V)	260 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	80 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	650 mA

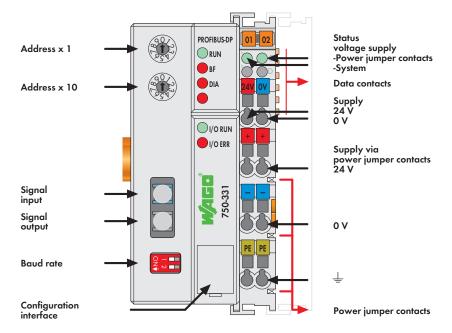
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 16
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	110.4 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



PROFIBUS DP Fieldbus Coupler

1.5 Mbaud; digital and analog signals





This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the PROFIBUS DP fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the PROFIBUS DP fieldbus to the PLC, PC or NC for further processing, and received from the field via PROFIBUS DP.

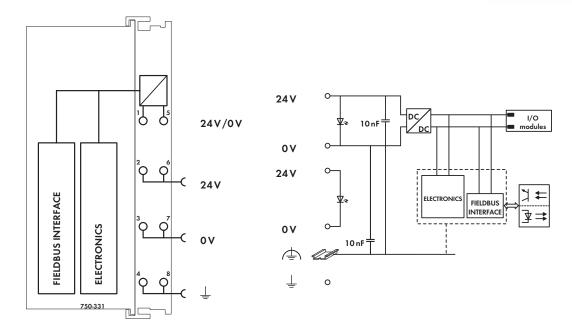
Notice: GSD files required

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

For the operation of a PROFIBUS DP coupler with fiber optic cable connection, an interface module is also necessary to transfer RS-485 on a fiber optic ring. A subring can contain up to 10 other fiber optic modules. The baud rate is set via two DIP switches on the buscoupler.

Description		Item No.	Pack Unit
PROFIBUS DP 1	.5 MBd / Opt. Fiber	750-331	1
Accessories		Item No.	Pack Unit
GSD files	Download: www.w	•	
Miniature WSB	Quick marking system		_
Common D	plain	248-501	5
Commissed	with marking	see Section 11	
white distribute			
Standards a	nd Approvals		
Standard		EN 50170	
Conformity markin	•	C€	
Korea Certification	n		
® UL 508			
DEKRA 11 ATEX (0203 X	II 3 G Ex nA II T4	

System Data	
No. of couplers connected to Master	10 in the subring
Transmission medium	APF (plastic) fiber (1000µm)
Max. length of fieldbus segment	1 m 25 m
Topology	Subring, single-fiber ring
Baud rate	93.75 Kbaud 1500 Kbaud
Buscoupler connection	HP Simplex fiber optic plug (included)



Technical Data	
Number of I/O modules	64
Max. input process image	128 bytes
Max. output process image	128 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-15 % +20 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-15 % +20 %)
Current via power jumper contacts (max.)	
The state of the s	

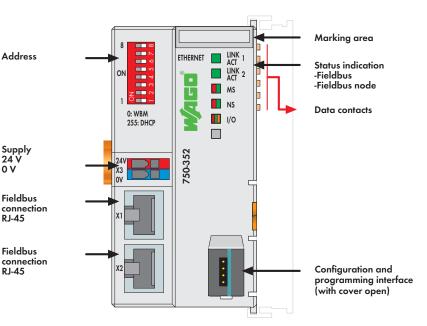
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	187 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4
DIP Switches	
Baud rate	93.75 kBd / S1 = off; S2 = off
	187.5 kBd / S1 = off; S2 = on
	500 kBd / S1 = on; S2 = off
	1500 kBd / S1 = on; S2 = on



ETHERNET Fieldbus Coupler

10/100 Mbit/s; digital and analog signals





The 750-352 ETHERNET Fieldbus Coupler connects ETHERNET to the modular WAGO-I/O-SYSTEM.

Address

Supply 24 V 0 V

Fieldbus

Fieldbus

RJ-45

The fieldbus coupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

Two ETHERNET interfaces and an integrated switch allow the fieldbus to be wired in a line topology. This eliminates additional network devices such as switches or hubs. Both interfaces support Auto-Negotiation and Auto-MDI(X). The DIP switch configures the last byte of the IP address and may be used for IP address assignment (DHCP, BootP, static).

The coupler is designed for fieldbus communication in both Ethernet/IP and MODBUS networks. It also supports a wide variety of standard ETHERNET protocols (e.g., HTTP, BootP, DHCP, DNS, SNMP, FTP).

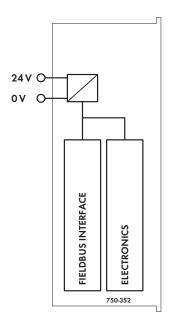
An integrated Web server provides configuration and status information to the

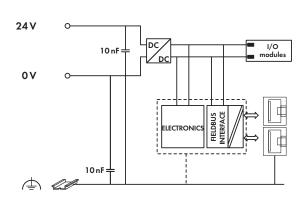
The coupler has an integrated supply terminal for the system voltage. The field power jumper contacts are supplied via a separate supply module.

Description		Item No.	Pack. Unit
ETHERNET Coup	ler	750-352	1
			Pack.
Accessories		Item No.	Unit
Miniature WSB C	Quick marking syste	em	
Greenman (2)	plain	248-501	5
Locurrenced	with marking	see Section 11	
white the same			
estaction and			
Suntanana			
Approvals			
Approvals Conformity marking	•	C€	
Approvals Conformity marking Korea Certification	1	(€	
Approvals Conformity markin. Korea Certification Marine application	1	7.7	NKK, PRS, RIN
Approvals Conformity markin. Korea Certification Marine application ® UL 508	n ns	ABS, BV, DNV, GL, KR, LR, I	
Approvals Conformity markin. Korea Certification Marine application ® UL 508 ® ANSI/ISA 12.	ns 12.01	ABS, BV, DNV, GL, KR, LR, I	
Approvals Conformity markin. Korea Certification Marine application ® UL 508	ns 12.01	ABS, BV, DNV, GL, KR, LR, I Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb,	
Approvals Conformity markin. Korea Certification Marine application ® UL 508 ® ANSI/ISA 12.	ns 12.01	ABS, BV, DNV, GL, KR, LR, I Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc,	T4
Approvals Conformity markin: Korea Certification Marine application ® UL 508 ® ANSI/ISA 12. TÜV 07 ATEX 5	.12.01 554086 X	ABS, BV, DNV, GL, KR, LR, I Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Do	T4
Approvals Conformity markin. Korea Certification Marine application © UL 508 © ANSI/ISA 12. TÜV 07 ATEX 5	.12.01 :54086 X	ABS, BV, DNV, GL, KR, LR, I Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Do ure 0 °C +60 °C	T4
Approvals Conformity markin: Korea Certification Marine application ® UL 508 ® ANSI/ISA 12. TÜV 07 ATEX 5	.12.01 :54086 X	ABS, BV, DNV, GL, KR, LR, 1 Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Do ure 0 °C +60 °C Ex d I Mb,	T4
Approvals Conformity markin. Korea Certification Marine application © UL 508 © ANSI/ISA 12. TÜV 07 ATEX 5	.12.01 :54086 X	ABS, BV, DNV, GL, KR, LR, I Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Do ure 0 °C +60 °C	T4
Approvals Conformity markin. Korea Certification Marine application © UL 508 © ANSI/ISA 12. TÜV 07 ATEX 5	.12.01 :54086 X	ABS, BV, DNV, GL, KR, LR, 1 Class I, Div. 2, Grp. ABCD, I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Do ure 0 °C +60 °C Ex d I Mb,	T4

System Data	
No. of couplers connected to Master	limited by ETHERNET specification
Transmission medium	Twisted Pair S-UTP
	100 Ω, Cat 5;
	Max. line length: 100 m
Baud rate	10/100 Mbit/s
Transmission performance	Class D acc. to EN 50173
Buscoupler connection	2 x RJ-45
Protocols	EtherNet/IP, MODBUS/TCP (UDP), HTTP,
	BootP, DHCP, DNS, FTP, SNMP







General Specifications

Number of I/O modules	64
with bus extension	250
Max. input process image	1020 words
Max. output process image	1020 words
Configuration	via PC
Power supply	24 V DC (-25 % +30 %)
Input current typ. at rated load (24 V)	280 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	90 %
Internal current consumption (5 V)	450 mA
Total current for I/O modules (5 V)	700 mA
Isolation	500 V system/supply

Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 14
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	112 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications



ETHERNET TCP/IP Fieldbus Coupler

10 Mbit/s; digital and analog signals



ETHERNET voltage supply ON -System -Power jumper contacts Fieldbus LINK connection RJ-45 ■TxD/RxD Data contacts ERROR Supply 24 V 0 V **l**/0 Supply via power jumper contacts 24 V 750-342 0 V Configuration Power jumper contacts interface

The ETHERNET TCP/IP fieldbus coupler supports a number of network protocols to send process data via ETHERNET TCP/IP. By observing the relevant IT standards, connection to existing local or global networks (LAN, Internet) is possible without any problem.

Using ETHERNET as a fieldbus makes universal data transmission between the factory and the office possible. Moreover, the ETHERNET TCP/IP fieldbus coupler offers remote maintenance, i.e. processes can be controlled regardless of the location

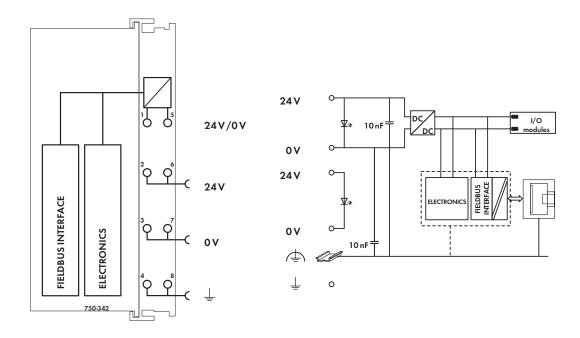
Process data exchange is done using the MODBUS/TCP protocol. The buscoupler supports all I/O modules and automatically configures, creating a local process image.

The HTML pages that are stored in the fieldbus coupler allow access to

information on configuration, status, or I/O data of the ETHERNET TCP/IP fieldbus coupler. Only a standard WEB browser is required. Dynamic configuration of the IP addresses via a BootP server provides a flexible and easy way to configure the network.

Description		Item No.	Pack. Unit
ETHERNET TCP/	IP 10 MBit	750-342	1
Accessories		Item No.	Pack. Unit
Miniature WSB	Quick marking syste	em	
Garage (plain	248-501	5
Localinated	with marking	see Section 11	
white distributions			
Approvals			
Conformity marking	•	(€	
Korea Certificatio			
Marine application •® UL 508	ons	ABS, BV, DNV, GL, KR, LR,	NKK, PRS, RIN
. ⊕ . OL 308 . ⊕ ANSI/ISA 12	12.01	Class I, Div. 2, Grp. ABCD	TA
TÜV 12.1297 X (Fx nA IIC T4 Gc	, 14
© TÜV 07 ATEX .		I M2 Ex d I Mb,	
2 10 7 07 7 11 27 1	50 1000 A	II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C D	lc .
Permiss	ible ambient temperati	ure 0 °C +60 °C	
IECEx TUN 09.00		Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex tc IIIC T135°C Dc	
	ible ambient temperati		

System Data	
No. of couplers connected to Master	limited by ETHERNET specification
Transmission medium	Twisted Pair S-UTP 100 Ω cat. 5
Max. length of fieldbus segment	100 m between hub station and 750-342;
	max. length of network limited by
	ETHERNET specification
Baud rate	10 Mbit/s
Buscoupler connection	RJ-45
Protocols	MODBUS/TCP, HTTP, BootP,
	MODBUS/UDP



Technical Data	
Number of I/O modules	64
Max. input process image	512 bytes
Max. output process image	512 bytes
Max. number of socket connections	1 HTTP; 3 MODBUS/TCP
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	200 mA
Total current for I/O modules (5 V)	1800 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

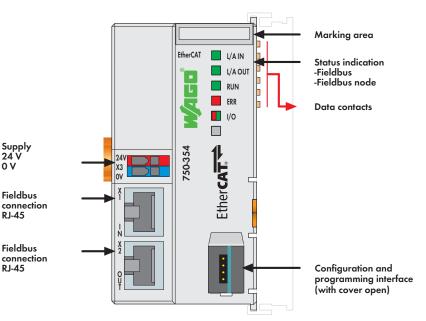
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	197 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



EtherCAT Fieldbus Coupler

100 Mbit/s; digital and analog signals





The 750-354 EtherCAT Fieldbus Coupler connects EtherCAT to the modular WAGO-I/O-SYSTEM.

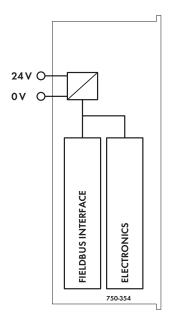
The fieldbus coupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

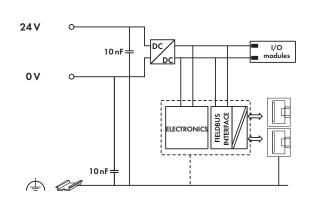
The "upper" EtherCAT interface connects the coupler to the network. The "lower" RJ-45 socket connects additional EtherCAT devices to the same line.

EtherCAT® (Ethernet Control Automation Technology) is a real-time ETHERNET solution designed for industrial automation applications and characterized by high performance, flexible topology and simple configuration. With EtherCAT®, the costly ETHERNET star topology can be replaced with a simple line or tree structure.

Description		Item No.	Pack. Unit
EtherCAT® Couple	er	750-354	1
Accessories		Item No.	Pack. Unit
Miniature WSB Q	uick marking syste		
Commence	plain	248-501	5
Learning	with marking	see Section 11	
CHARLEST CO.			
Approvals			
Conformity marking		ÇĘ	
Conformity marking Korea Certification		(€	
Conformity marking Korea Certification			
Conformity marking Korea Certification ® UL 508 ® ANSI/ISA 12.1	2.01	Class I, Div. 2, Grp. ABCD, T4	
Conformity marking Korea Certification	2.01	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb,	
Conformity marking Korea Certification ® UL 508 ® ANSI/ISA 12.1	2.01	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc,	
Conformity marking Korea Certification UL 508 Name ANSI/ISA 12.1 TÜV 07 ATEX 55	2.01 54086 X	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc	
Conformity marking Korea Certification © UL 508 © ANSI/ISA 12.1 © TÜV 07 ATEX 55	2.01 4086 X le ambient temperate	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C	
Conformity marking Korea Certification UL 508 Name ANSI/ISA 12.1 TÜV 07 ATEX 55	2.01 54086 X le ambient temperate	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C Ex d I Mb,	
Conformity marking Korea Certification © UL 508 © ANSI/ISA 12.1 © TÜV 07 ATEX 55	2.01 54086 X le ambient temperate	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc,	
Conformity marking Korea Certification © UL 508 © ANSI/ISA 12.1 © TÜV 07 ATEX 55 Permissib IECEx TUN 09.000	2.01 54086 X le ambient temperatu 1 X	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc, Ex tc IIIC T135°C Dc	
Conformity marking Korea Certification © UL 508 © ANSI/ISA 12.1 © TÜV 07 ATEX 55 Permissib IECEx TUN 09.000	2.01 54086 X le ambient temperatu 1 X	Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc,	

System Data	
No. of couplers connected to Master	limited by EtherCAT specification
Transmission medium	Shielded twisted pair
	S/FTP, F/FTP or SF/FTP;
	100 Ω, Cat 6
Baud rate	100 Mbit/s
Transmission performance	Class D acc. to EN 50173-1
Buscoupler connection	2 x RJ-45
Protocols	EtherCAT (direct mode)
EtherCAT [®] is regristered trademark and p Automation GmbH, Germany.	patented technology, licensed by Beckhoff





General Specifications

Technical Data	
Number of I/O modules	64
Max. input process image	1024 bytes
Max. output process image	1024 bytes
Configuration	via PC
Power supply	24 V DC (-25 % +30 %)
Input current typ. at rated load (24 V)	250 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	85 %
Internal current consumption (5 V)	300 mA
Total current for I/O modules (5 V)	700 mA
Isolation	500 V system/supply

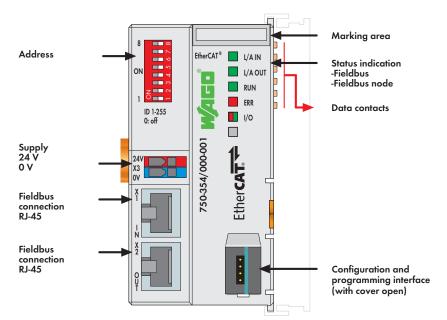
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 14
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	65 x 50 x 97
	Height from upper-edge of DIN 35 rail
Weight	152 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3
	· · · · ·



EtherCAT® Fieldbus Coupler, ID Switch

100 Mbit/s; digital and analog signals





The 750-354 EtherCAT $^{\circ}$ Fieldbus Coupler connects EtherCAT $^{\circ}$ to the modular WAGO-I/O-SYSTEM.

The fieldbus coupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit.

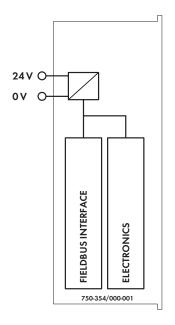
The upper EtherCAT $^{\odot}$ interface connects the coupler to the network. The lower RJ-45 socket connects additional EtherCAT $^{\odot}$ devices to the same line.

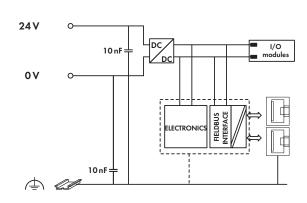
EtherCAT® (Ethernet Control Automation Technology) is a real-time ETHERNET solution designed for industrial automation applications and characterized by high performance, flexible topology and simple configuration. With EtherCAT®, the costly ETHERNET star topology can be replaced with a simple line or tree structure.

The address selection switch is used to set an Explicit Device ID (EDI), which allows a fixed address to be assigned to an EtherCAT $^{\! \odot}$ slave.

Description			Item No.	Pack. Unit
EtherCAT® Fieldb	us Coupler, ID Switch		750-354/000-001	1
			I. N	Pack.
Accessories			Item No.	Unit
Miniature WSB G	vick marking system			
Commission	plain		248-501	5
Localitation	with marking		see Section 11	
CHARLEST CO.				
Approvals				
Conformity marking	J	C€		
Marine application	s	GL		
⁴ ®∞ UL 508				

No. of couplers connected to Master	limited by EtherCAT specification
Transmission medium	Shielded twisted pair
	S/FTP, F/FTP or SF/FTP;
	100 Ω, Cat 6
Baud rate	100 Mbit/s
Transmission performance	Class D acc. to EN 50173-1
Buscoupler connection	2 x RJ-45
Protocols	EtherCAT (direct mode)
Table of CAT® is not enabled and beautiful or only one of a	patented technology, licensed by Beckhof
zinercai is regristerea trademark and p	oaieniea iechnology, licensea by Beckhot





General Specifications

Technical Data	
Number of I/O modules	64
Max. input process image	1024 bytes
Max. output process image	1024 bytes
Configuration	via PC
Power supply	24 V DC (-25 % +30 %)
Input current typ. at rated load (24 V)	250 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	85 %
Internal current consumption (5 V)	300 mA
Total current for I/O modules (5 V)	700 mA
Isolation	500 V system/supply

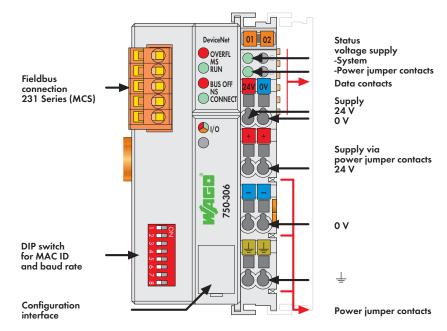
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	65 x 50 x 97
	Height from upper-edge of DIN 35 rail
Weight	152 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications



DeviceNet Fieldbus Coupler

125 ... 500 Kbaud; digital and analog signals





This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the Device $\mathbf{Net}^{\mathsf{TM}}$ fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

Device \mathbf{Net}^{TM} stores the process image in the corresponding Master control (PLC, PC or NC).

Notice: EDS files required

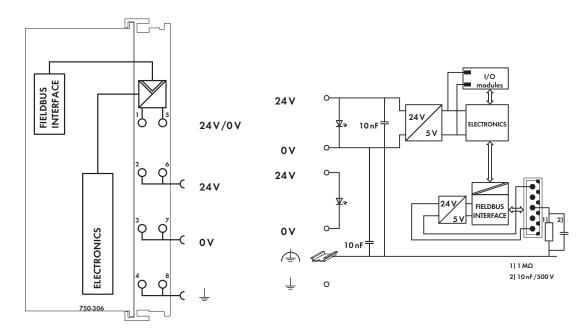
The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the Device**Net**TM fieldbus to the PLC, PC or NC for further processing, and received from the field via Device**Net**TM.

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
DeviceNet, w/ s	tatus byte	750-306	1
DeviceNet (only for	unction with digital modu	les) 750-306/000-005	1
DeviceNet (withou	ut buskoppler status byte	750-306/000-006	1
Accessories		Item No.	Pack. Unit
EDS files	Download: www.wa	igo.com	
Miniature WSB	Quick marking system		
Communical Property of the Communical Property o	plain	248-501	5
CONTROL OF THE PARTY OF T	with marking	see Section 11	
Approvals			
Certification		ODVA	
Conformity markin	ng	C€	
Korea Certification	n		
Marine application	s (versions upon request)	ABS, BV, DNV, GL, KR, LR, N	IKK, PRS, RIN
.®∞ UL 508			
® ANSI/ISA 12		Class I, Div. 2, Grp. ABCD,	Г4
□ TÜV 07 ATEX 5	554086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C Dc	
	ble ambient temperature		
IECEx TUN 09.00	001 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
D	11 12 11	Ex tc IIIC T135°C Dc	
Permissi	ible ambient temperature	U -C +6U -C	

System Data	
No. of couplers connected to Master	64 with scanner
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Shielded Cu cable Trunk line:
	2 x 0.82 mm ² + 2 x 1.7 mm ²
	Drop line: 2 x 0.2 mm ² + 2 x 0.32 mm ²
Max. length of bus line	100 m 500 m
	(depends on baud rate/cable)
Baud rate	125 Kbaud, 250 Kbaud, 500 Kbaud
Buscoupler connection	5-pole male connector, 231 Series (MCS),
	female connector 231-305/010-000/
	050-000 (included)





	64
Max. input process image	0-7
	512 bytes
Aax. output process image	512 bytes
Configuration	via PC or PLC
DeviceNet features	Polled I/O message connection
	Strobed I/O message connection
	Change of state
	Cyclic message connection
	Group 2 only, slave
ower supply	24 V DC (-25 % +30 %)
Current consumption	
via power supply terminal	< 500 mA / 24 V
via DeviceNet interface	< 120 mA / 11 V
ower supply efficiency	87 %
nternal current consumption (5 V)	350 mA
otal current for I/O modules (5 V)	1650 mA
solation	500 V system/supply
Oltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	200 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications

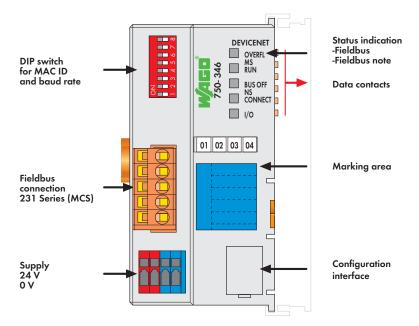




DeviceNet ECO Fieldbus Coupler

125 ... 500 Kbaud; digital and analog signals





The ECO fieldbus coupler is designed for applications with a reduced scale I/O requirement. Using digital only process data or small amounts of analogs, while retaining all of the choice that's offered by the Series 750 I/O.

The coupler has an integrated supply terminal for the system voltage. The field power jumper contacts are supplied via a separate supply module.

The Device**Net**TM buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules.

Device**Net**TM stores the process image in the corresponding Master control (PLC, PC or NC).

Notice: EDS files required

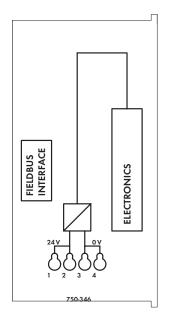
The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the Device**Net**TM fieldbus to the PLC, PC or NC for further processing, and received from the field via Device**Net**TM.

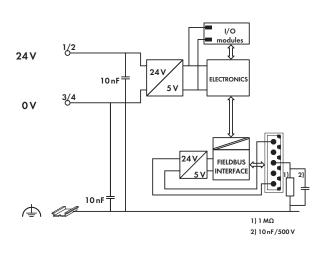
The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
DeviceNet ECO		750-346	1
Accessories		Item No.	Pack. Unit
EDS files	Download: www.	•	
Miniature WSB C	Quick marking syste		_
Commission	plain	248-501	5
Learning	with marking	see Section 11	
CHISTOTOPINA			
Approvals			
Conformity marking	•	(€	
Korea Certification		K	
® UL 508			
₀‰ ANSI/ISA 12.		Class I, Div. 2, Grp. ABCD, T4	
.®∞ ANSI/ISA 12. TÜV 12.1297 X (B	rasilien)	Ex nA IIC T4 Gc	
₀‰ ANSI/ISA 12.	rasilien)	Ex nA IIC T4 Gc I M2 Ex d I Mb,	
.®∞ ANSI/ISA 12. TÜV 12.1297 X (B	rasilien)	Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc,	
-®- ANSI/ISA 12.TÜV 12.1297 X (B- E TÜV 07 ATEX 5	irasilien) 54086 X	Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc	
• ANSI/ISA 12. TÜV 12.1297 X (B TÜV 07 ATEX 5	orasilien) 54086 X ole ambient temperatu	Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ore 0 °C +60 °C	
-®- ANSI/ISA 12.TÜV 12.1297 X (B- E TÜV 07 ATEX 5	orasilien) 54086 X ole ambient temperatu	Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0°C +60°C Ex d I Mb,	
• ANSI/ISA 12. TÜV 12.1297 X (B TÜV 07 ATEX 5	orasilien) 54086 X ole ambient temperatu	Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0°C +60°C Ex d I Mb, Ex nA IIC T4 Gc,	
•®• ANSI/ISA 12. TÜV 12.1297 X (B © TÜV 07 ATEX 5 Permissil IECEx TUN 09.000	orasilien) 54086 X ole ambient temperatu	Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0°C +60°C Ex d I Mb, Ex nA IIC T4 Gc, Ex tc IIIC T135°C Dc	

System Data	
No. of couplers connected to Master	64 with scanner
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Shielded Cu cable Trunk line:
	$2 \times 0.82 \text{ mm}^2 + 2 \times 1.7 \text{ mm}^2$
	Drop line: 2 x 0.2 mm ² + 2 x 0.32 mm ²
Max. length of bus line	100 m 500 m
	(depends on baud rate/cable)
Baud rate	125 Kbaud, 250 Kbaud, 500 Kbaud
Buscoupler connection	5-pole male connector, 231 Series (MCS),
	female connector 231-305/010-000/
	050-000 (included)







Technical Data	
Number of I/O modules	64
Max. input process image	32 bytes
Max. output process image	32 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-15 % +20 %)
Current consumption	
via power supply terminal (typ.) at	
nominal load (24 V)	260 mA
via DeviceNet interface	< 120 mA / 11 V
Efficiency of the power supply (typ.) at	
nominal load (24 V)	80 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	650 mA

General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 14
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	115 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4

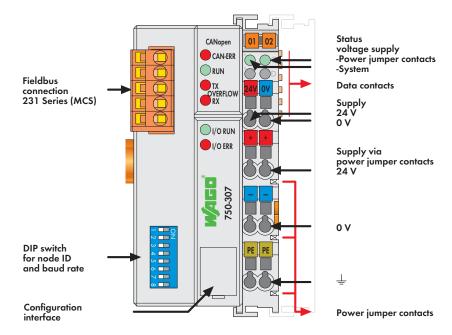




CANopen Fieldbus Coupler

10 Kbaud ... 1 Mbaud; digital and analog signals





This buscoupler connects the WAGO-1/O-SYSTEM as a slave to the CANopen fieldbus. The module data is transmitted using PDOs and SDOs.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the CANopen fieldbus to the PLC, PC or NC for further processing, and received from the field via CANopen.

The data of the analog modules is stored in the PDOs according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and also mapped in the PDOs. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

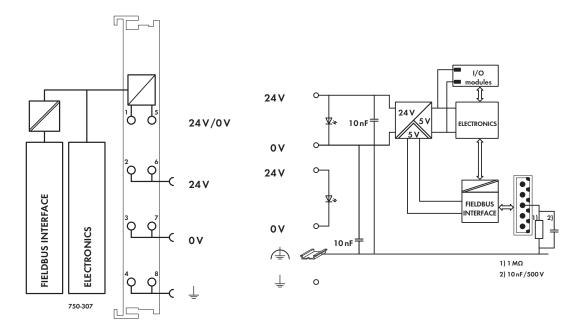
All entries of the object dictionary can be mapped - as the user likes - in the 5 Rx PDOs and 5 Tx PDOs.

The complete input and output process image can be transmitted using SDOs.

When implementing new installations, please consider 750-337 fieldbus coupler with extended functions. Notice: EDS files required!

Description		Item No.	Pack. Unit
CANopen		750-307	1
Accessories		Item No.	Pack. Unit
EDS files	Download: www.		
Miniature WSB Q	uick marking syste		
Commence 2	plain	248-501	5
Localitation	with marking	see Section 11	
CHARLEST THE STREET			
Approvals			
Conformity marking	1	(€	
Korea Certification			
(®u UL 508		u	
® ANSI/ISA 12.1	12.01	Class I, Div. 2, Grp. ABCD, T4	
	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex to IIIC T135°C Do	
Permissib	le ambient temperatu	ure 0 °C +60 °C	
IECEx TUN 09.000)1 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex to IIIC T135°C Do	
Permissib	le ambient temperatu	ure 0 °C +60 °C	

System Data	
No. of couplers connected to Master	110
Transmission medium	Shielded Cu cable 3 x 0.25 mm²
Max. length of bus line	30 m 1000 m
	(depends on baud rate/cable)
Baud rate	10 Kbaud 1 Mbaud
Buscoupler connection	5-pole male connector, 231 Series (MCS)
	female connector 231-305/010-000
	(included)



Number of I/O modules	64
Max. input process image	512 bytes
Max. output process image	512 bytes
Configuration	via PC or PLC
No. of PDOs	5 Tx / 5 Rx
No. of SDOs	2 server SDOs
Communication profile	DS-301 V3.0
Device profile	DS-401 V1.4
COB ID distribution	SDO, standard
Node ID distribution	DIP switches
Other CANopen features	NMT slave
	Minimum boot-up
	Variable PDO mapping
	Emergency message
	Life guarding
Power supply	24 V DC (-15 % +20 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-15 % +20 %)
Current via power jumper contacts (max.)	10 A DC

General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	200 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4

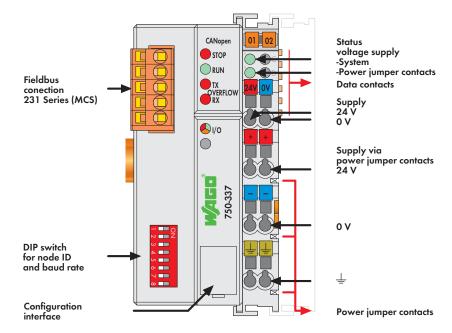




CANopen Fieldbus Coupler

10 Kbaud ... 1 Mbaud; digital and analog signals





This buscoupler connects the WAGO-1/O-SYSTEM as a slave to the CANopen fieldbus. The module data is transmitted using PDOs and SDOs.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the CANopen fieldbus to the PLC, PC or NC for further processing, and received from the field via CANopen.

The data of the analog modules is stored in the PDOs according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and also mapped in the PDOs. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

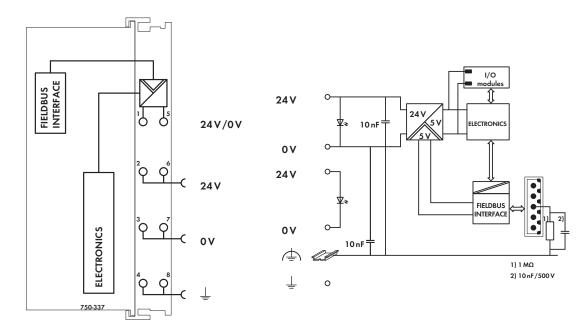
All entries of the object dictionary can be mapped - as the user likes - in the $32\ Rx\ PDOs\ and\ 32\ Tx\ PDOs.$

The complete input and output process image can be transmitted using SDOs. "Spacer modules" can be set via software.

Notice: EDS files required

Description		Item No.	Pack. Unit
CANopen MCS		750-337	1
CANopen MCS/	′ T	750-337/025-000	1
Extended tempero	iture range: -20 °C +6	0 °C	
Accessories		Item No.	Pack. Unit
EDS files	Download: www.wo	igo.com	
Miniature WSB	Quick marking system		
Communical I	plain	248-501	5
2021111111	with marking	see Section 11	
Approvals			
Conformity markin	ng	(€	
Korea Certificatio	n		
Marine application	s (versions upon request)	ABS, BV, DNV, GL, KR, LR, NI	KK, PRS, RIN
® ANSI/ISA 12	.12.01	Class I, Div. 2, Grp. ABCD, Ta	4
TÜV 12.1297 X (Brasilien)	Ex nA IIC T4 Gc	
□ TÜV 07 ATEX 5	554086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C Dc	
Permiss	ible ambient temperature	0 °C +60 °C	
IECEx TUN 09.00	001 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex tc IIIC T135°C Dc	
Parmice	ible ambient temperature	0 °C +60 °C	

System Data	
No. of couplers connected to Master	110
Transmission medium	Shielded Cu cable 3 x 0.25 mm²
Max. length of bus line	30 m 1000 m
	(depends on baud rate/cable)
Baud rate	10 Kbaud 1 Mbaud
Buscoupler connection	5-pole male connector, 231 Series (MCS)
	female connector 231-305/010-000
	(included)



General Specifications

Number of I/O modules	64
Max. input process image	512 bytes
Max. output process image	512 bytes
Configuration	via PC or PLC
No. of PDOs	32 Tx / 32 Rx
No. of SDOs	2 server SDOs
Communication profile	DS-301 V4.1
Device profile	DS 401 V2.0
	Marginal check
	Edge-triggered PDOs
	Programmable error response
COB ID distribution	SDO, standard
Node ID distribution	DIP switches
Other CANopen features	NMT slave
	Minimum boot-up
	Variable PDO mapping
	Emergency message
	Life guarding
	Configuration of virtual modules
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

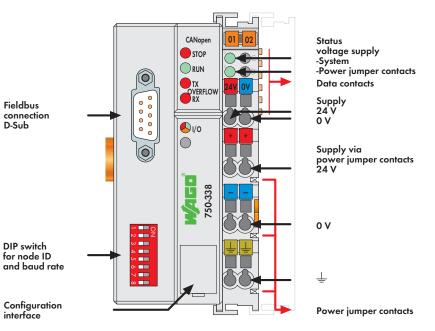
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	220 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications
	, , , , , , , , , , , , , , , , , , , ,



CANopen Fieldbus Coupler D-Sub

10 Kbaud ... 1 Mbaud; digital and analog signals





This buscoupler connects the WAGO I/O SYSTEM as a slave to the CANopen fieldbus.

D-Sub

The module data is transmitted using PDOs and SDOs.

The buscoupler is capable of supporting all bus modules. The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is packed into bytes. CANopen allows the storing of the process image in the corresponding Master control (PLC, PC or NC).

The local process image is divided into two data zones containing the data received and the data to be sent.

The process data can be sent via the CANopen fieldbus to the PLC, PC or NC for further processing, and received from the field via CANopen.

The data of the analog modules is stored in the PDOs according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and also mapped in the PDOs. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new

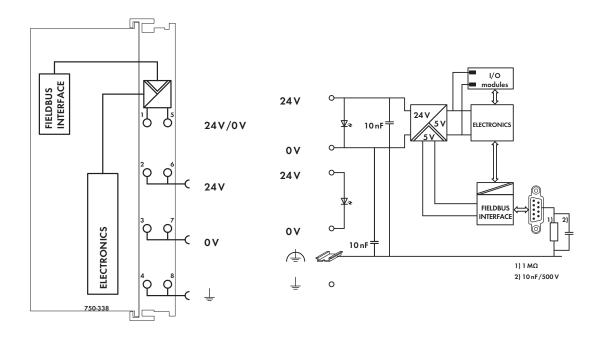
All entries of the object dictionary can be mapped - as the user likes - in the 32 Rx PDOs and 32 Tx PDOs.

The complete input and output process image can be transmitted using SDOs. "Spacer modules" can be set via software.

Notice: EDS files required

Description		Item No.	Pack. Unit
CANopen D-Sub		750-338	1
			Pack.
Accessories		Item No.	Unit
EDS files	Download: www.	· ·	
Miniature WSB G	uick marking syste		
Communical Property of the Communical Property o	plain	248-501	5
Learning	with marking	see Section 11	
white blill below			
Approvals			
Conformity marking	3	(€	
		T/2	
Korea Certification		C	
Korea Certification Marine application	s	క్ర BV, GL, NKK, PRS, RINA	
	s	u-c	
Marine application [®] UL 508 [®] ANSI/ISA 12.	12.01	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4	
Marine application •®= UL 508	12.01	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb,	
Marine application [®] UL 508 [®] ANSI/ISA 12.	12.01	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc,	
Marine application (S)= UL 508 (S)= ANSI/ISA 12. (E) TÜV 07 ATEX 5:	12.01 54086 X	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc	
Marine application (©= UL 508 (©= ANSI/ISA 12. (E) TÜV 07 ATEX 5.	12.01 54086 X ole ambient temperatu	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C	
Marine application (S)= UL 508 (S)= ANSI/ISA 12. (E) TÜV 07 ATEX 5:	12.01 54086 X ole ambient temperatu	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0 °C +60 °C Ex d I Mb,	
Marine application Output Ou	12.01 54086 X ole ambient temperatu	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc,	
Marine application (®= UL 508 (®= ANSI/ISA 12. (E) TÜV 07 ATEX 5: Permissib IECEX TUN 09.000	12.01 54086 X ole ambient temperatu	BV, GL, NKK, PRS, RINA Class I, Div. 2, Grp. ABCD, T4 I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc, Ex tc IIIC T135°C Dc	

System Data	
No. of couplers connected to Master	110
Transmission medium	Shielded Cu cable 3 x 0.25 mm ²
Max. length of bus line	30 m 1000 m
	(depends on baud rate/cable)
Baud rate	10 Kbaud 1 Mbaud
Buscoupler connection	1 x D-Sub 9; plug



General Specifications

COB ID distribution SDO, stando Node ID distribution DIP switches Other CANopen features Minimum bo Variable PDO Emergency n Life guarding Configuratio Power supply 24 V DC (-2 Max. input current (24 V) 500 mA Power supply efficiency 87 % Internal current consumption (5 V) 350 mA Fotal current for I/O modules (5 V) 1650 mA solation 500 V syster	
Configuration via PC or PLC No. of PDOs 32 Tx / 32 No. of SDOs Communication profile Device profile Devi	
No. of PDOs No. of PDOs No. of SDOs 2 server SDO Communication profile Device profile Marginal chelled programmab COB ID distribution DIP switches NMT slave Minimum bother CANopen features Minimum bother CANopen features Minimum bother configuration Confi	
No. of SDOs 2 server SDC Communication profile DS-301 V4. Device profile DS 401 V2. Marginal che Edge-trigger Programmab COB ID distribution Node ID distribution DIP switches Other CANopen features Minimum bo Variable PDC Emergency re Life guarding Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) Solo MA Solation Voltage via power jumper contacts 24 V DC (-2. 105.00 IA. 105.0	2
Communication profile DS-301 V4. Device profile DS 401 V2. Marginal che Edge-triggere Programmab COB ID distribution Node ID distribution DIP switches Other CANopen features Minimum bo Variable PDC Emergency relating uarding Configuration Configuration Power supply Max. input current (24 V) Power supply efficiency Internal current consumption (5 V) Total current for I/O modules (5 V) Solo mA Solotage via power jumper contacts Marginal V2. Marginal che Edge-triggere Programmab SDO, stando NMT slave Minimum bo Variable PDC Emergency relating Configuration Solo mA Solotage via power jumper contacts DS-301 V4. Marginal Che Edge-triggere Programmab SDO, stando SDO, stando SDO, stando SDO, stando NMT slave Minimum bo Variable PDC Emergency relating Soloma Soloma Soloma Soloma Solova vsyster Voltage via power jumper contacts	₹x
Device profile DS 401 V2.0 Marginal che Edge-triggere Programmab COB ID distribution Node ID distribution DiP switches Other CANopen features Minimum bo Variable PDC Emergency n Life guarding Configuratio Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) solution Solution Journal of Value Marginal che Edge-triggere Minimum bo Variable PDC Emergency n Life guarding Configuratio 24 V DC (-2 350 mA Total current for I/O modules (5 V) 1650 mA solution Solution Voltage via power jumper contacts	Os
Marginal che Edge-triggere Programmab COB ID distribution SDO, stando Node ID distribution Dither CANopen features Minimum bo Variable PDO Emergency n Life guarding Configuratio Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) Solo mA Solotion Solo V syster Voltage via power jumper contacts	1
Edge-trigger Programmab COB ID distribution SDO, stando Node ID distribution DiP switches Other CANopen features Minimum bo Variable PDO Emergency n Life guarding Configuratio Configuratio Power supply 44 V DC (-2 Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) Solo mA Solotion Solo V syster Voltage via power jumper contacts)
Programmab COB ID distribution SDO, stando Node ID distribution DIP switches Other CANopen features Minimum bo Variable PDO Emergency n Life guarding Configuratio Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) Solo mA Solation Solo V syster Voltage via power jumper contacts	eck
COB ID distribution Node ID distribution DIP switches Other CANopen features Minimum bo Variable PDC Emergency n Life guarding Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) solution SDO, standa Minimum bo Variable PDC Emergency n Life guarding Configuratio 24 V DC (-2 350 mA Total current for I/O modules (5 V) 1650 mA solation SOO V syster Voltage via power jumper contacts	ed PDOs
Node ID distribution DIP switches NMT slave Minimum bo Variable PDC Emergency n Life guarding Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) solution Solution Solution Voltage via power jumper contacts DIP switches NMT slave Minimum bo Variable PDC Emergency n Life guarding Configuratio 24 V DC (-2.	le error response
Other CANopen features Minimum bo Variable PDC Emergency n Life guarding Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) Solo mA Solation Solo V syster Voltage via power jumper contacts NMT slave Minimum bo Emergency 1 Life guarding Configuratio 24 V DC (-2.	ırd
Minimum bo Variable PDC Emergency n Life guarding Configuratio Configuratio 24 V DC (-2 Max. input current (24 V) Power supply efficiency 87 % Internal current consumption (5 V) Total current for I/O modules (5 V) Solotion 500 V syster Voltage via power jumper contacts Minimum bo Notinimum	
Variable PDC Emergency n Life guarding Configuratio Power supply Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) solation Voltage via power jumper contacts Variable PDC Emergency 87 % 1650 mA 500 V syster 24 V DC (-2.	
Emergency n	ot-up
Life guarding Configuratio Power supply 24 V DC (-2. Max. input current (24 V) Power supply efficiency nternal current consumption (5 V) Total current for I/O modules (5 V) Solotion Solotion Soloty Syster Voltage via power jumper contacts	O mapping
Configuration Power supply 24 V DC (-2. Max. input current (24 V) 500 mA Power supply efficiency 87 % Internal current consumption (5 V) 350 mA Fotal current for I/O modules (5 V) 1650 mA Isolation 500 V system Voltage via power jumper contacts 24 V DC (-2. Max. input current for I/O modules (5 V) 1650 mA Internal current for I/O modules (5 V) 1650 mA	nessage
Power supply 24 V DC (-2. Max. input current (24 V) 500 mA Power supply efficiency 87 % Internal current consumption (5 V) 350 mA Total current for I/O modules (5 V) 1650 mA solation 500 V system Voltage via power jumper contacts 24 V DC (-2.)
Max. input current (24 V) Power supply efficiency Internal current consumption (5 V) Solotal current for I/O modules (5 V) Solotal current for I/O modules (5 V) Solotage via power jumper contacts 500 V system 24 V DC (-2.	n of virtual modules
Power supply efficiency 87 % Internal current consumption (5 V) 350 mA Total current for I/O modules (5 V) 1650 mA Solation 500 V system Voltage via power jumper contacts 24 V DC (-2.)	5 % +30 %)
nternal current consumption (5 V) 350 mA Total current for I/O modules (5 V) 1650 mA solation 500 V syster Voltage via power jumper contacts 24 V DC (-2.)	
Fotal current for I/O modules (5 V) 1650 mA 500 V syster Voltage via power jumper contacts 24 V DC (-2.	
solation 500 V system Voltage via power jumper contacts 24 V DC (-2.	
Voltage via power jumper contacts 24 V DC (-2	
	m/supply
Current via power jumper contacts (max.) 10 A DC	5 % +30 %)

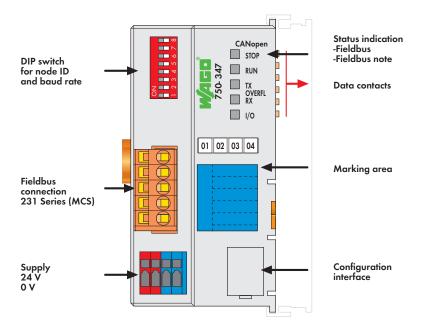
Operating temperature Wire connection Cross sections Strip lengths Dimensions (mm) W x H x L Weight Storage temperature Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference EMC emission of interference	CAGE CLAMP® 0.08 mm² 2.5 mm² / AWG 28 14 8 9 mm / 0.33 in 51 x 65 x 100 Height from upper-edge of DIN 35 rail 200 g -25 °C +85 °C 95 % acc. to IEC 60068-2-6 acc. to IEC 60068-2-7 IP20 acc. to EN 61000-6-2, marine applications acc. to EN 61000-6-4, marine applications
Strip lengths Dimensions (mm) W x H x L Weight Storage temperature Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference	8 9 mm / 0.33 in $51 \times 65 \times 100$ Height from upper-edge of DIN 35 rail 200 g $-25 ^{\circ}\text{C}$ +85 $^{\circ}\text{C}$ 95 $^{\circ}\text{C}$ acc. to IEC 60068-2-6 acc. to IEC 60068-2-7 IP20 acc. to EN 61000-6-2, marine applications
Dimensions (mm) W x H x L Weight Storage temperature Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference	8 9 mm / 0.33 in $51 \times 65 \times 100$ Height from upper-edge of DIN 35 rail 200 g $-25 ^{\circ}\text{C}$ +85 $^{\circ}\text{C}$ 95 $^{\circ}\text{C}$ acc. to IEC 60068-2-6 acc. to IEC 60068-2-7 IP20 acc. to EN 61000-6-2, marine applications
Weight Storage temperature Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference	Height from upper-edge of DIN 35 rail 200 g -25 °C +85 °C 95 % acc. to IEC 60068-2-6 acc. to IEC 60068-2-27 IP20 acc. to EN 61000-6-2, marine applications
Storage temperature Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference	200 g -25 °C +85 °C 95 % acc. to IEC 60068-2-6 acc. to IEC 60068-2-27 IP20 acc. to EN 61000-6-2, marine applications
Storage temperature Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference	200 g -25 °C +85 °C 95 % acc. to IEC 60068-2-6 acc. to IEC 60068-2-27 IP20 acc. to EN 61000-6-2, marine applications
Relative air humidity (no condensation) Vibration resistance Shock resistance Degree of protection EMC immunity of interference	95 % acc. to IEC 60068-2-6 acc. to IEC 60068-2-27 IP20 acc. to EN 61000-6-2, marine applications
Vibration resistance Shock resistance Degree of protection EMC immunity of interference	acc. to IEC 60068-2-6 acc. to IEC 60068-2-27 IP20 acc. to EN 61000-6-2, marine applications
Shock resistance Degree of protection EMC immunity of interference	acc. to IEC 60068-2-27 IP20 acc. to EN 61000-6-2, marine applications
Degree of protection EMC immunity of interference	IP20 acc. to EN 61000-6-2, marine applications
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



CANopen ECO Fieldbus Coupler MCS

10 Kbaud ... 1 Mbaud; digital and analog signals





The ECO fieldbus coupler is designed for applications with a reduced scale I/O requirement. Using digital only process data or small amounts of analogs, while retaining all of the choice that's offered by the Series 750 I/O.

The coupler has an integrated supply terminal for the system voltage. The field power jumper contacts are supplied via a separate supply module.

The CANopen bus coupler is capable of supporting all I/O modules and automatically configures, creating a local process image.

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the CANopen fieldbus to the PLC, PC or NC for further processing, and received from the field via CANopen.

Notice: EDS files required

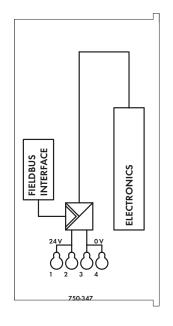
The data of the analog modules is stored in the PDOs according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and also mapped in the PDOs. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

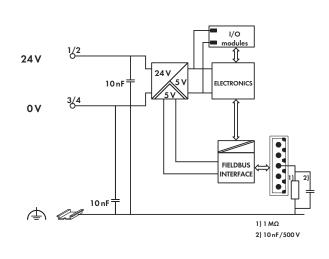
All entries of the object dictionary can be mapped - as the user likes - in the 5 Rx PDOs and 5 Tx PDOs.

The complete input and output process image can be transmitted using SDOs. "Spacer modules" can be set via software.

Description		Item No.	Pack. Unit
CANopen ECO I	NCS	750-347	1
Accessories		Item No.	Pack. Unit
EDS files	Download: www.	wago.com	
Miniature WSB (Quick marking syste	em	
Communication	plain	248-501	5
Localitation	with marking	see Section 11	
CHARLES THE PARTY OF			
Approvals Conformity markin		(€	
Korea Certification	•	IG.	
Marine application		ABS, BV, DNV, GL, KR, LR, I	NKK PRS RIN
-® UL 508	-		, ,
⊕ ANSI/ISA 12	.12.01	Class I, Div. 2, Grp. ABCD,	T4
TÜV 12.1297 X (E	Brasilien)	Ex nA IIC T4 Gc	
□ TÜV 07 ATEX 5	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex to IIIC T135°C Do	
	ble ambient temperatu	ure 0 °C +60 °C	
IECEx TUN 09.00	01 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
	ble ambient temperatu	Ex tc IIIC T135°C Dc	

System Data	
No. of couplers connected to Master	110
Transmission medium	Shielded Cu cable 3 x 0.25 mm ²
Max. length of bus line	30 m 1000 m
	(depends on baud rate/cable)
Baud rate	10 Kbaud 1 Mbaud
Buscoupler connection	5-pole male connector, 231 Series (MCS female connector 231-305/010-000
	(included)





General Specifications

	64
Max. input process image	32 bytes
Max. output process image	32 bytes
Configuration	via PC or PLC
No. of PDOs	5 Tx / 5 Rx
No. of SDOs	1 server SDO
Communication profile	DS-301 V4.1
Device profile	DS-401 V2.0
	Programmable error response
COB ID distribution	SDO, standard
Node ID distribution	DIP switches
Other CANopen features	NMT slave
· ·	Minimum boot-up
	Variable PDO mapping
	Emergency message
	Life guarding
Power supply	24 VDC (-25 % +30 %)
Input current typ. at rated load (24 V)	260 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	80 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	650 mA

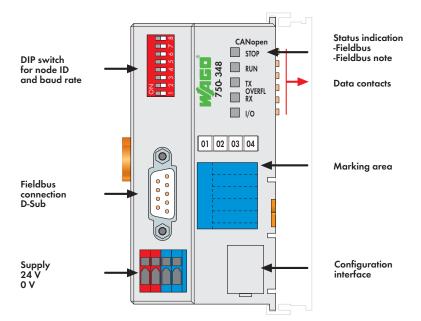
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 16
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	135 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



CANopen ECO Fieldbus Coupler D-Sub

10 Kbaud ... 1 Mbaud; digital and analog signals





The ECO fieldbus coupler is designed for applications with a reduced scale I/O requirement. Using digital only process data or small amounts of analogs, while retaining all of the choice that's offered by the Series 750 I/O. The coupler has an integrated supply terminal for the system voltage. The field power jumper contacts are supplied via a separate supply module. The CANopen bus coupler is capable of supporting all I/O modules and automatically configures, creating a local process image. The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the CANopen fieldbus to the PLC, PC or NC for further processing, and received from the field via CANopen.

The data of the analog modules is stored in the PDOs according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and also mapped in the PDOs. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

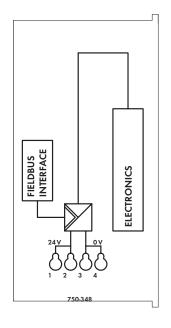
All entries of the object dictionary can be mapped - as the user likes - in the 5 Rx PDOs and 5 Tx PDOs.

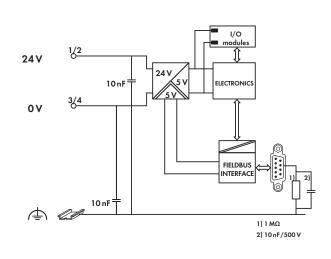
The complete input and output process image can be transmitted using SDOs. "Spacer modules" can be set via software.

Notice: EDS files required

Description		Item No.	Pack. Unit
CANopen ECO D)-Sub	750-348	1
Accessories		Item No.	Pack. Unit
EDS files	Download: www.		
Miniature WSB (Quick marking syste		_
Commence	plain	248-501	5
becommend	with marking	see Section 11	
white I had below			
Approvals			
Conformity marking	g	C€	
Korea Certification	ı	C	
Marine application	ıs	ABS, BV, DNV, GL, KR, LR,	NKK, PRS, RIN
.௵∞ UL 508			
® ANSI/ISA 12.		Class I, Div. 2, Grp. ABCE), T4
TÜV 12.1297 X (B	'	Ex nA IIC T4 Gc	
⊕ TÜV 07 ATEX 5	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	\ -
Dor::1	ble ambient temperatu)C
IECEx TUN 09.00		Ex d I Mb,	
1LCLX 1014 07.00	OTA	Ex nA IIC T4 Gc.	
		Ex tc IIIC T135°C Dc	

System Data	
No. of couplers connected to Master	110
Transmission medium	Shielded Cu cable 3 x 0.25 mm²
Max. length of bus line	30 m 1000 m
	(depends on baud rate/cable)
Baud rate	10 Kbaud 1 Mbaud
Buscoupler connection	1 x D-Sub 9; plug





General Specifications

Number of I/O modules	64
Max. input process image	32 bytes
Max. output process image	32 bytes
Configuration	via PC or PLC
No. of PDOs	5 Tx / 5 Rx
No. of SDOs	1 server SDO
Communication profile	DS-301 V4.1
Device profile	DS-401 V2.0
	Programmable error response
COB ID distribution	SDO, standard
Node ID distribution	DIP switches
Other CANopen features	NMT slave
	Minimum boot-up
	Variable PDO mapping
	Emergency message
	Life guarding
Power supply	24 V DC (-25 % +30 %)
input current typ. at rated load (24 V)	260 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	80 %
nternal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	650 mA

Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 16
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	115 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



SERCOS Fieldbus Coupler

2-port; 100 Mbit/s; digital and analog signals

RJ-45



SERCOS III Status voltage supply LINK Fieldbus -System -Power jumer contacts connection **S3** Data contacts ○TxD/RxD Supply 24 V 0 V Fieldbus **6**1/0 connection RJ-45 **USR** Supply via power jumper contacts 24 V 750-351 Address Configuration Power jumper contacts interface

The 750-351 Fielbus Coupler connects the WAGO-I/O-SYSTEM to the SERCOS network.

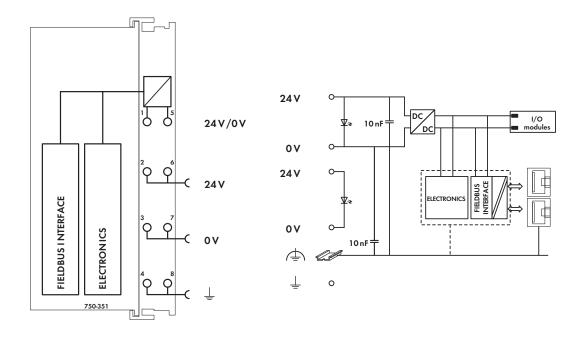
The fieldbus coupler is capable of supporting all WAGO I/O modules. The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes; digital data is sent bit by bit. The buscoupler can integrate into the application as a SERCOS I/O device and supports the SERCOS service channel (SVC), real-time channel (RTC) and TCP/IP communication standard.

Two integrated ports allow easy creation of a line or ring structure without requiring additional components. The ports support Auto-MDI/MDIX and will automatically detect the data direction so interchanging cables on the coupler will not impact operation.

The SERCOS node ID is assigned directly via network configuration.

Description		Item No.	Pack. Unit
SERCOS Coupler		750-351	1
Accessories		Item No.	Pack. Unit
Miniature WSB G	Quick marking syste		
Commence	plain	248-501	5
Legenmonad	with marking	see Section 11	
Secretary and Control of the Control			
Approvals SERCOS version		V1.1.1	
IO profile		V1.1.1	
Conformity marking	•	C€	
Korea Certification		I	
Marine application	S	ABS, BV, DNV, GL, KR, LR,	PRS, RINA
.®∞ UL 508			
® ANSI/ISA 12.		Class I, Div. 2, Grp. ABCD), T4
⊕ TÜV 07 ATEX 5.	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
D	I II ii	II 3 D Ex tc IIIC T135°C D)c
	ole ambient temperatu		
IECEx TUN 09.000	JI X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		F IIIC T125°C D-	
D 1	ole ambient temperatu	Ex tc IIIC T135°C Dc	

System Data	
Number of couplers (slaves) in Sercos ring	512
Transmission medium	Twisted Pair S-UTP 100 Ω Cat. 5
Max. length of fieldbus segment	100 m, limited by ETHERNET specification
Max. length of network	51.2 km, limited by ETHERNET
	specification
Baud rate	100 Mbit/s, full duplex
Buscoupler connection	2 x RJ-45
Protocols	SERCOS, FSP-IO, TCP/IP, FTP, HTTP, BootP,
	DHCP, SNTP
Supported services	SVC, RTC, CC, IP, ring break (GDP_Basic,
	SCP_VarCFG, SCP_Sync)



Number of I/O modules	64
with bus extension	250
Max. input process image	2 Kbytes (RTC and SVC)
Max. output process image	2 Kbytes (RTC and SVC)
Configuration	Node configuration via:
•	WAGO ETHERNET settings,
	Web-based management,
	WAGO-I/O-CHECK,
	SERCOS Master (CP2 or higher),
	address selector switch
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	300 mA
Total current for I/O modules (5 V)	1700 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)

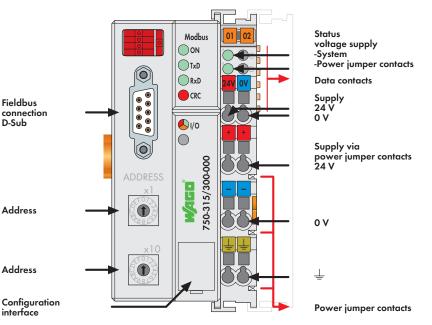
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	210 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



MODBUS Fieldbus Coupler

RS-485; 150 baud ... 115.2 Kbaud; digital and analog signals





This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the MODBUS fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The data of the analog modules is stored in the process image, which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
MODBUS / RS-48	5 / 150 Bd 115.2 kBd	750-315/300-000	1
Accessories		Item No.	Pack. Unit
Miniature WSB Q	uick marking system	248-501	_
Lecture 11	plain with marking	see Section 11	5
Approvals			
Conformity marking	(€	
Marine applications		V, DNV, GL, KR, NKK, PRS,	rina
® UL 508			
® ANSI/ISA 12.1	2.01 C	lass I, Div. 2, Grp. ABCD, Ta	1
	4086 X	M2 Ex d I Mb,	
	II	3 G Ex nA IIC T4 Gc,	
	ll l	3 D Ex to IIIC T135°C Do	
Permissibl	le ambient temperature 0 °	C +60 °C	
IECEx TUN 09.000	1 X E:	k d I Mb,	
	E	k nA IIC T4 Gc,	
		c tc IIIC T135°C Dc	
	Ex		

No. of couplers connected to Master	247 with repeater
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Shielded Cu cable 2 (4) x 0.25 mm ²
Max. length of fieldbus segment	1200 m (depends on baud rate/cable)
Baud rate	150 baud 115.2 Kbaud
Buscoupler connection	1 x D-Sub 9; socket

Technical Data	
Number of I/O modules	64
Max. input process image	512 bytes
Max. output process image	512 bytes
Configuration	Via PC or rotary encoder switch
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

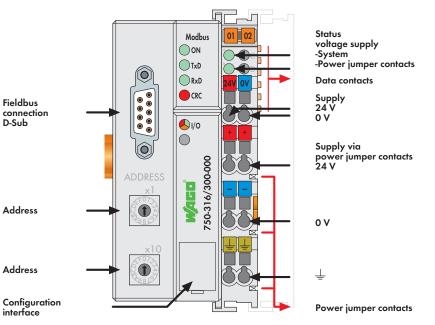
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	183.2 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



MODBUS Fieldbus Coupler

RS-232; 150 baud ... 115.2 Kbaud; digital and analog signals





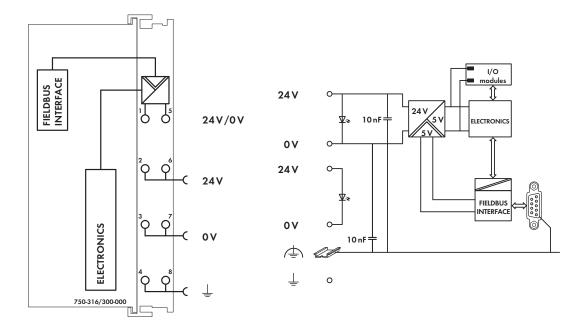
This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the MODBUS fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The data of the analog modules is stored in the process image, which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds eight bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
MODBUS / RS-2	32 / 150 Bd 115.2 k	Bd 750-316/300-000	1
Accessories		Item No.	Pack. Unit
Miniature WSB C	Quick marking system		
Garage (plain	248-501	5
Secretaria	with marking	see Section 11	
Supplier and			
Approvals			
Conformity marking	9	C€	
Marine application	S	BV, DNV, GL, KR, NKK, PRS,	rina
® UL 508			
®≈ ANSI/ISA 12.		Class I, Div. 2, Grp. ABCD, T	4
	54086 X	I M2 Ex d I Mb,	
		II 3 G Ex nA IIC T4 Gc,	
		II 3 D Ex tc IIIC T135°C Dc	
	ole ambient temperature		
IECEx TUN 09.00	01 X	Ex d I Mb,	
		Ex nA IIC T4 Gc,	
		Ex tc IIIC T135°C Dc	
Permissil	ole ambient temperature	0 °C +60 °C	

No. of couplers connected to Master	247 with repeater
Max. no. of I/O points	approx. 6000 (depends on master)
Transmission medium	Shielded Cu cable 2 (4) x 0.25 mm ²
Max. length of fieldbus segment	1200 m (depends on baud rate/cable)
Baud rate	150 baud 115.2 Kbaud
Buscoupler connection	1 x D-Sub 9; socket



Technical Data	
Number of I/O modules	64
Max. input process image	512 bytes
Max. output process image	512 bytes
Configuration	Via PC or rotary encoder switch
Power supply	24 V DC (-25 % +30 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-25 % +30 %)
Current via power jumper contacts (max.)	10 A DC

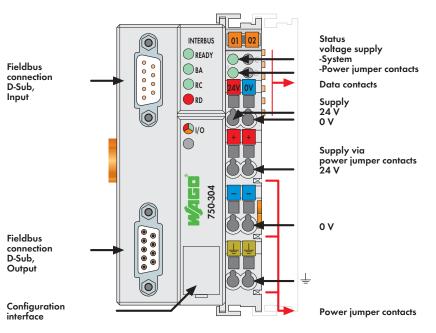
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	184.8 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



INTERBUS Fieldbus Coupler

500 Kbaud; digital and analog signals





This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the INTERBUS fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

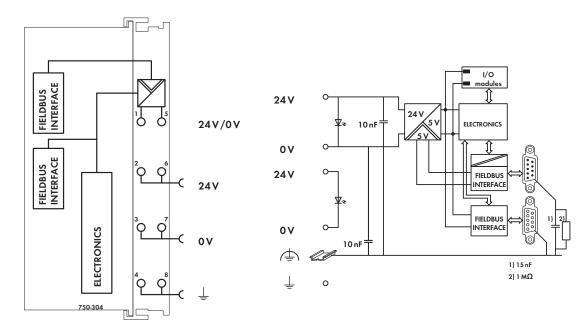
INTERBUS stores the process image in the corresponding Master control (PLC, PC or NC).

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the INTERBUS fieldbus to the PLC, PC or NC for further processing, and received from the field via INTERBUS. The process data can be sent via the INTERBUS fieldbus to the PLC, PC or NC for further processing, and received from the field via INTERBUS.

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
INTERBUS 500 k	Bd	750-304	1
Accessories		Item No.	Pack. Unit
INTERBUS files		Download: www.wag	go.com
Miniature WSB (Quick marking syste	em	
Garage (Control of Control of Con	plain	248-501	5
Secremental	with marking	see Section 11	
con de de la co	ad Ammentale		
Standards an	ia Approvais		
Standards an	ia Approvais	EN 50254	
	ia Approvais	EN 50254 INTERBUS CLUB	
Standard		INTERBUS CLUB C€	
Standard Certification	9	INTERBUS CLUB	
Standard Certification Conformity marking	9	INTERBUS CLUB C€	
Standard Certification Conformity marking Korea Certification (®= UL 508 (®= ANSI/ISA 12.	g 1	INTERBUS CLUB CE Class I, Div. 2, Grp. ABCD	, T4
Standard Certification Conformity marking Korea Certification (®= UL 508	g 1	INTERBUS CLUB CE Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb,	, T4
Standard Certification Conformity marking Korea Certification (®= UL 508 (®= ANSI/ISA 12.	g 1	INTERBUS CLUB () Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc,	
Standard Certification Conformity markin, Korea Certification ® UL 508 ® ANSI/ISA 12. TÜV 07 ATEX 5	9 .12.01 .54086 X	INTERBUS CLUB C Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C D	
Standard Certification Conformity markin, Korea Certification (®= UL 508 (®= ANSI/ISA 12. (®) TÜV 07 ATEX 5	g .12.01 .54086 X ble ambient temperate	INTERBUS CLUB C Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C D ure 0 °C +60°C	
Standard Certification Conformity markin, Korea Certification ® UL 508 ® ANSI/ISA 12. TÜV 07 ATEX 5	g .12.01 .54086 X ble ambient temperate	INTERBUS CLUB C Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C D ure 0 °C +60 °C Ex d I Mb,	
Standard Certification Conformity markin, Korea Certification ® UL 508 ® ANSI/ISA 12. TÜV 07 ATEX 5	g .12.01 .54086 X ble ambient temperate	INTERBUS CLUB C Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C D ure 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc,	
Standard Certification Conformity markin, Korea Certification (®= UL 508 (®= ANSI/ISA 12. (®) TÜV 07 ATEX 5 Permissil IECEx TUN 09.00	g .12.01 .54086 X ble ambient temperate	INTERBUS CLUB C Class I, Div. 2, Grp. ABCD I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex te IIIC T135°C D Jre 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc, Ex te IIIC T135°C Dc	

System Data	
No. of couplers connected to Master	256
Max. no. of I/O points	4096 (depends on master)
Transmission medium	Certified Cu cable
Max. length of fieldbus segment	400 m
Baud rate	500 Kbaud
Transmission time	typ. 1.43 ms (10 couplers; 32 digital I/O
Buscoupler connection	1 x D-Sub 9; plug for input interface
	1 x D-Sub 9; socket for output interface



Number of I/O modules	64
Max. input process image	64 bytes
Max. output process image	64 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-15 % +20 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	300 mA
	(as from version 0101),
	450 mA (previous versions)
Total current for I/O modules (5 V)	1 <i>7</i> 00 mA
	(as from version 0101),
	1550 mA (previous versions)
solation	500 V system/supply
Oltage via power jumper contacts	24 V DC (-15 % +20 %)
Current via power jumper contacts (max.)	10 A DC

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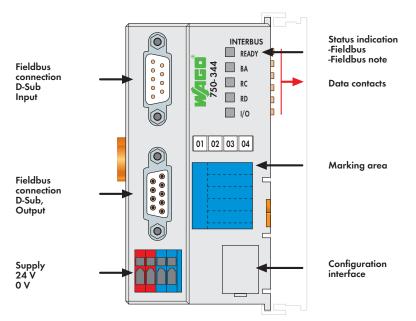




INTERBUS ECO Fieldbus Coupler

500 Kbaud; digital and analog signals





The ECO fieldbus coupler is designed for applications with a reduced scale I/O requirement. Using digital only process data or small amounts of analogs, while retaining all of the choice that's offered by the Series 750 I/O.

The coupler has an integrated supply terminal for the system voltage. The field power jumper contacts are supplied via a separate supply module.

The INTERBUS bus coupler automatically configures, creating a local process image which may include analog, digital or specialty modules.

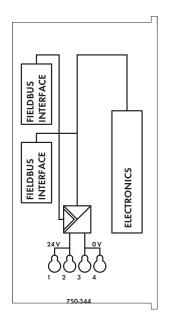
INTERBUS stores the process image in the corresponding Master control (PLC, PC or NC).

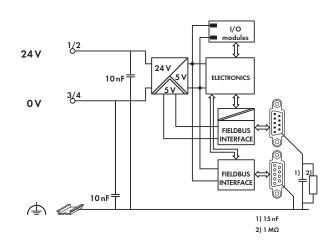
The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the INTERBUS fieldbus to the PLC, PC or NC for further processing, and received from the field via INTERBUS.

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
INTERBUS ECO	500 kBd	750-344	1
Accessories		Item No.	Pack.
			Unit
INTERBUS files		Download: www.wa	go.com
Miniature WSB	Quick marking syste		-
Commission	plain	248-501	5
Learning	with marking	see Section 11	
Standards a	nd Approvals		
Standard	na Approvais	EN 50254	
Conformity marking	na	(f	
Korea Certification	•		
₀®∞ UL 508		EC.	
	.12.01	Class I, Div. 2, Grp. ABCD), T4
® ANSI/ISA 12			
,	Brasilien)	Ex nA IIC T4 Gc	
,	'	Ex nA IIC T4 Gc I M2 Ex d I Mb,	
	'	2.4.13.4.11.0.1.1.0.0	
TÜV 12.1297 X (TÜV 07 ATEX :	554086 X	I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C E	Ос
TÜV 12.1297 X (TÜV 07 ATEX :	'	I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C E	Ос
TÜV 12.1297 X (TÜV 07 ATEX :	554086 X ible ambient temperatu	I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C E)c
TÜV 12.1297 X (TÜV 07 ATEX (554086 X ible ambient temperatu	I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C E ure 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc,	Oc
TÜV 12.1297 X (TÜV 07 ATEX S Permiss	554086 X ible ambient temperatu	I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C E ire 0 °C +60 °C Ex d I Mb,	Oc

System Data	
No. of couplers connected to Master	256
Max. no. of I/O points	4096 (depends on master)
Transmission medium	Certified Cu cable
Max. length of fieldbus segment	400 m
Baud rate	500 Kbaud
Transmission time	typ. 1.43 ms (10 couplers; 32 digital I/Os
	per coupler)
Buscoupler connection	1 x D-Sub 9; plug for input interface
	1 x D-Sub 9; socket for output interface





General Specifications

Technical Data	
Number of I/O modules	64
Max. input process image	20 bytes
Max. output process image	20 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-15 % +20 %)
Input current typ. at rated load (24 V)	260 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	80 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	650 mA

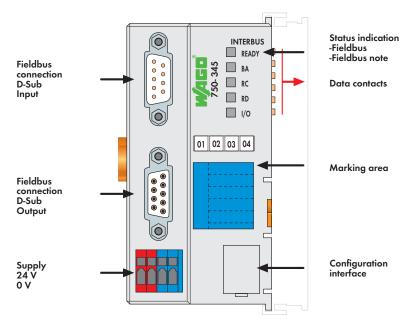
•	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 16
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	115 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4



INTERBUS ECO Fieldbus Coupler

2 Mbaud; digital and analog signals





This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the INTERBUS fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

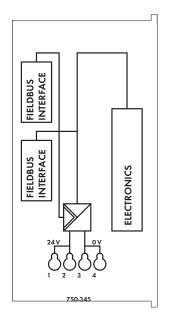
INTERBUS stores the process image in the corresponding Master control (PLC, PC or NC).

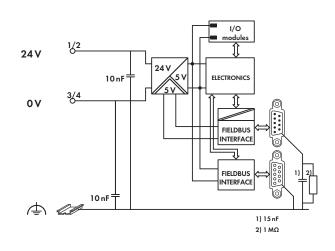
The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the INTERBUS fieldbus to the PLC, PC or NC for further processing, and received from the field via INTERBUS.

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description		Item No.	Pack. Unit
INTERBUS ECO	2 MBd	750-345	1
Accessories		Item No.	Pack. Unit
INTERBUS files		Download: www.wago	o.com
Miniature WSB	Quick marking syste		
Commence	plain	248-501	5
Leganitations	with marking	see Section 11	
	nd Approvals		
Standard		EN 50254	
Conformity markin		(€	
Korea Certification		C€ [©	
Korea Certification • UL 508	n		
Korea Certification • UL 508 • ANSI/ISA 12	.12.01	Class I, Div. 2, Grp. ABCD,	T4
Korea Certification ® UL 508 ® ANSI/ISA 12 TÜV 12.1297 X (I	.12.01 Brasilien)	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc	Т4
Korea Certification • UL 508 • ANSI/ISA 12	.12.01 Brasilien)	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb,	Т4
Korea Certification ® UL 508 ® ANSI/ISA 12 TÜV 12.1297 X (I	.12.01 Brasilien)	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc,	
Korea Certification © LL 508 © ANSI/ISA 12 TÜV 12.1297 X (I	n .12.01 Brasilien) 554086 X	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex te IIIC T135°C De	
Korea Certification ©= UL 508 ©= ANSI/ISA 12 TÜV 12.1297 X (I © TÜV 07 ATEX 5	n .12.01 Brasilien) 554086 X ible ambient temperatu	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc ure 0 °C +60 °C	
Korea Certification © LL 508 © ANSI/ISA 12 TÜV 12.1297 X (I	n .12.01 Brasilien) 554086 X ible ambient temperatu	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex te IIIC T135°C De tre 0°C +60°C Ex d I Mb,	
Korea Certification ©= UL 508 ©= ANSI/ISA 12 TÜV 12.1297 X (I © TÜV 07 ATEX 5	n .12.01 Brasilien) 554086 X ible ambient temperatu	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0°C +60°C Ex d I Mb, Ex nA IIC T4 Gc,	
Korea Certification © LL 508 © ANSI/ISA 12 TÜV 12.1297 X (II TÜV 07 ATEX 5	n .12.01 Brasilien) 554086 X ible ambient temperatu	Class I, Div. 2, Grp. ABCD, Ex nA IIC T4 Gc I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc are 0 °C +60 °C Ex d I Mb, Ex nA IIC T4 Gc, Ex tc IIIC T135°C Dc	

No. of couplers connected to Master	256
Max. no. of I/O points	4096 (depends on master)
Transmission medium	Certified Cu cable
Max. length of fieldbus segment	150 m
Baud rate	2 Mbaud
Transmission time	on request
Buscoupler connection	1 x D-Sub 9; plug for input interface 1 x D-Sub 9; socket for output interface





General Specifications

Number of I/O modules	64
Max. input process image	20 bytes
Max. output process image	20 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-15 % +20 %)
Input current typ. at rated load (24 V)	260 mA
Efficiency of the power supply (typ.) at	
nominal load (24 V)	80 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	650 mA

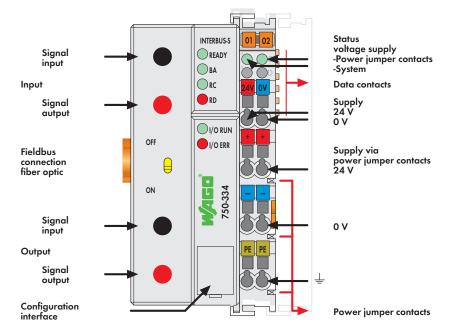
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 1.5 mm ² / AWG 28 16
Strip lengths	5 6 mm / 0.22 in
Dimensions (mm) W x H x L	50 x 65 x 97
	Height from upper-edge of DIN 35 rail
Weight	115 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4



INTERBUS Fieldbus Coupler

digital and analog signals; fiber optic





This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the INTERBUS fieldbus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the INTERBUS fieldbus to the PLC, PC or NC for further processing, and received from the field via INTERBUS.

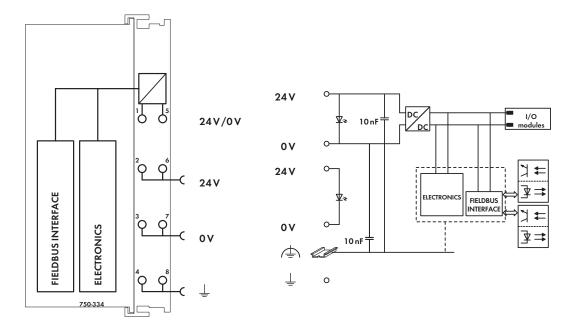
The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

The fiber optic INTERBUS coupler can be put in any place on the ring.

Description		Item No.	Pack. Unit
INTERBUS 500 kBd / Opt. Fiber		750-334	1
Accessories		Item No.	Pack. Unit
INTERBUS files		Download: www.wo	ıgo.com
Miniature WSB (Quick marking syste		
Communical Communication	plain	248-501	5
Legisterensed	with marking	see Section 11	
white little states			
Standards ar	nd Approvals		
	nd Approvals	EN 50254	
Standard	nd Approvals	EN 50254 INTERBUS CLUB	
Standard Certification			
Standard Certification Conformity markin	9	INTERBUS CLUB	
Standard Certification Conformity markin Korea Certification	9	INTERBUS CLUB	
Standard Certification Conformity markin Korea Certificatior ®= UL 508	g	INTERBUS CLUB	D, T4
Standard Certification Conformity markin Korea Certificatior • LL 508 • ANSI/ISA 12	g 1	INTERBUS CLUB C€ 【⑤	D, T4
Standard Certification Conformity markin Korea Certificatior	g .12.01 Brasilien)	INTERBUS CLUB C€ Class I, Div. 2, Grp. ABCI	D, T4
Standard Certification Conformity markin Korea Certificatior	g .12.01 Brasilien)	INTERBUS CLUB (Class I, Div. 2, Grp. ABCI Ex nA IIC T4 Gc	D, T4
Standard Certification Conformity markin Korea Certificatior ®- UL 508 ®- ANSI/ISA 12. TÜV 12.1297 X (E	g .12.01 Brasilien)	INTERBUS CLUB (Class I, Div. 2, Grp. ABCI Ex nA IIC T4 Gc	D, T4
Standard Certification Conformity markin Korea Certificatior ®- UL 508 ®- ANSI/ISA 12. TÜV 12.1297 X (E	g .12.01 Brasilien)	INTERBUS CLUB (Class I, Div. 2, Grp. ABCI Ex nA IIC T4 Gc), T4
Standards are Standard Certification Conformity markin Korea Certification © LL 508 © ANSI/ISA 12. TÜV 12.1297 X (E DEKRA 11 ATEX C	g .12.01 Brasilien)	INTERBUS CLUB (Class I, Div. 2, Grp. ABCI Ex nA IIC T4 Gc	D, T4

System Data	
No. of couplers connected to Master	256
Max. no. of I/O points	4096 (depends on master)
Transmission medium	APF (plastic) fiber (1000µm)
Topology	Ring, double fiber ring
Max. length of fieldbus segment	1 m 40 m
Baud rate	500 Kbaud
Buscoupler connection	F- SMA





Number of I/O modules	64
Max. input process image	64 bytes
Max. output process image	64 bytes
Configuration	via PC or PLC
Power supply	24 V DC (-15 % +20 %)
Max. input current (24 V)	500 mA
Power supply efficiency	87 %
Internal current consumption (5 V)	350 mA
Total current for I/O modules (5 V)	1650 mA
Isolation	500 V system/supply
Voltage via power jumper contacts	24 V DC (-15 % +20 %)
Current via power jumper contacts (max.)	10 A DC

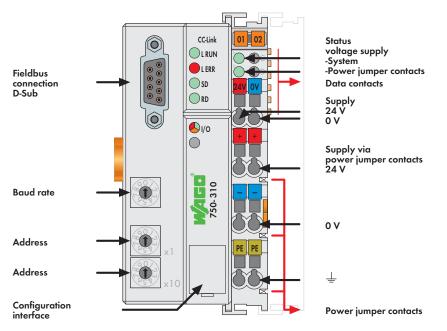
General Specifications	
Operating temperature	0 °C +55 °C
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	189.8 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4
Switch	
OFF	Fieldhan combactatha last fieldhan daoine
ON	Fieldbus coupler is the last fieldbus device
OIN	Output fieldbus interface is active



CC-Link Fieldbus Coupler

156 Kbaud ... 10 Mbaud; digital and analog signals





This bus coupler connects the WAGO-I/O-SYSTEM as a slave to the CC-Link field bus.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

CC-Link stores the process image in the corresponding Master control (PLC, PC or NC).

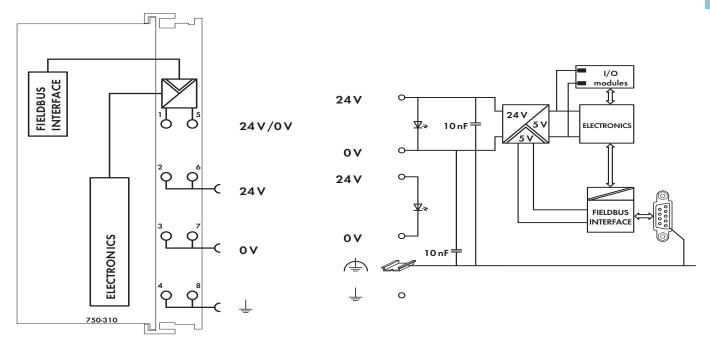
The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the CC-link fieldbus to the PLC, PC or NC for further processing, and received from the field via CC-link

The data of the analog modules is stored in the process image which is created automatically according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and added to the analog data. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

Description			Item No.	Pack. Unit
CC-Link			750-310	1
				Pack.
Accessories			Item No.	Unit
Miniature WSB Q	uick marking system	I		_
Commission	plain		248-501	5
Localitations	with marking		see Section 11	
white distribution	h D-Sub male connec		750-965	1
9 poles	n D-Sub male connec	ctor;	750-965	I
Approvals				
Conformity marking		C€		
Korea Certification				
.®∞ UL 508				
® ANSI/ISA 12.1		Clas	s I, Div. 2, Grp. ABCD, T4	
	4086 X	I M2	? Ex d I Mb,	
			G Ex nA IIC T4 Gc,	
		II 3 I	D Ex to IIIC T135°C Do	
	e ambient temperature	0 °C.	+60 °C	
IECEx TUN 09.000	1 X	Ex d	I Mb,	
IECEX 10IN 09.000		Ex n	A IIC T4 Gc,	
IECEX IUN 09.000				
IECEX TUN 09.000		Ex to	: IIIC T135°C Dc	
	e ambient temperature			
	e ambient temperature			

System Data	
No. of couplers connected to Master	64
Transmission medium	Shielded Cu cable 2 / 3 x 0.5 mm²
Max. length of bus line	100 m 1200 m
	(depends on baud rate/cable)
Baud rate	156 Kbaud 10 Mbaud
Buscoupler connection	1 x D-Sub 9; socket





General Specifications

Operating temperature

64
up to 4
14-byte digital,
2-byte system,
32-byte analog
14-byte digital,
2-byte system,
32-byte analog
24 VDC (-25 % +30 %)
500 mA
87 %
300 mA
1700 mA
500 V system/supply
24 VDC (-25 % +30 %)
10 A DC

Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² 2.5 mm ² / AWG 28 14
Strip lengths	8 9 mm / 0.33 in
Dimensions (mm) W x H x L	51 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	210 g
Storage temperature	-25 °C +85 °C
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	acc. to IEC 60068-2-27
Degree of protection	IP20
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-4

0 °C ... +55 °C

