

The 750-333 Fieldbus Coupler maps the peripheral data of all the WAGO I/O System's I/O modules on PROFIBUS DP. When initializing, the coupler determines the node's module structure and creates the process image of all inputs and outputs. Modules with a bit width smaller than eight are grouped in one byte for address space optimization. It is furthermore possible to deactivate I/O modules and to modify the image of the node according to the connected signals without having to modify the existing control application. The diagnostic concept is based on ID- and channel-related diagnostics according to EN 50170. This does away with the need for programming modules to evaluate manufacturer-specific diagnostic data.

Notes

Note **Note: Configuration files required (GSD)!**

Technical data

Communication	PROFIBUS
Number of fieldbus nodes on master (max.)	96
Number of I/O points	6000
Baud rate	9.6 kBd... 12 MBd
Bus segment length (max.)	1200 m
Transmission medium	Cu cable per EN 50170
Transmission time	typ. 1 ms (10 couplers; each 32 digital I/O and 12 Mbaud) max. 3.3 ms
Number of modules per node (max.)	63
Input and output process image (fieldbus) max.	244 bytes/244 bytes
Supply voltage (system)	24 VDC (-25 ... +30 %); via pluggable connector (CAGE CLAMP® connection)
Current consumption (5 V system supply)	200 mA
Total current (system supply)	1800 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts

Technical data

Input current (typ.) at nominal load (24 V)	500 mA
Power supply efficiency (typ.) at nominal load (24 V)	87 %
Isolation	500 V system/field
Number of outgoing power jumper contacts	3
Current carrying capacity (power jumper contacts)	10 A
Standard	EN 50170

Connection data

Connection technology: communication/fieldbus	PROFIBUS: 1 x D-sub 9 socket
Connection technology: field supply	6 x CAGE CLAMP®
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: device configuration	1 x Male connector; 4-pole
Connection type 1	System/field supply
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	50.5 mm / 1.988 inches
Height	100 mm / 3.937 inches
Depth	71.1 mm / 2.799 inches
Depth from upper-edge of DIN-rail	63.9 mm / 2.516 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	2.988 MJ
Weight	183.1 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-4, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data	
Product Group	15 (Remote I/O)
eCl@ss 10.0	27-24-26-07
eCl@ss 9.0	27-24-26-07
ETIM 8.0	EC001603
ETIM 7.0	EC001603
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4045454526856
Customs tariff number VKOrg Germany	85176200000

Approvals and certificates

Ex-Approvals

Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCCEX CQST/CNEX	CNCA-C23-01	2020312310000215 (Ex nA IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0035_X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	20-KA4BO-0642X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Country specific Approvals

Approval	Standard	Certificate name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-FBC750

Ship Approvals

Approval	Standard	Certificate name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA0000194

Ship Approvals

KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

UL-Approvals



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Downloads




Environmental Product Compliance




Compliance Search

Environmental Product
Compliance 750-333



Documentation



Manual			
PROFIBUS DP/ V1 Field- bus Coupler	V 1.2.0	pdf 7379.14 KB	
System Manual WAGO I/O System 750 / 753	V 3.1.0 11.05.2022	pdf 8495.90 KB	
System Manual Series 750/753			

System Description			
750/753 Series I/O- System – General Pro- duct Information		pdf 953.35 KB	
Overview on WAGO-I/ O-SYSTEM 750 appro- vals		pdf 770.48 KB	
Use in Hazardous Envi- ronments	V 1.0.0	pdf 1007.06 KB	

Additional Information




Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	
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Bid Text





750-333	19.02.2019	xml 6.03 KB	
750-333	21.07.2017	doc 28.50 KB	

Application Notes


Application note SIEMENS

PROFIBUS DP & PROFI- NET IO Diagnose für Siemens CPU 1200 & 1500 (a100211)	V2.1.0 03.12.2019	zip 7307.38 KB	
PROFIBUS DP & PROFI- NET IO Diagnose für Siemens CPU 300 & 400 (a100210)	V2.0.0 07.10.2015	zip 3948.40 KB	
Using iPar-Server opti- on with WAGO PROFI- safe modules (a114802)	V 13.0 09.05.2022	zip 76811.89 KB	


CAD/CAE-Data

CAD data	CAE data
2D/3D Models 750-333 	EPLAN Data Portal 750-333 
	WSCAD Universe 750-333 
	ZUKEN Portal 750-333 

Runtime Software

Firmware			
0750-0333, Feldbus-koppler PROFIBUS DP	V 23 29.07.2021	zip 503.89 KB	

Device Files

Device Driver			
WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB	

Libraries

Device Description File			
750-910; GSD files for PROFIBUS / 750, 752, 755, 758 and 767 Series	6.6 15.01.2021	zip 5084.22 KB	

1 Compatible products

1.1 Optional accessories

1.1.1 Cables and connectors

1.1.1.1 Connector plug



Item no.: 750-960
Fieldbus Connector PROFIBUS; with D-sub male connector; 9-pole

1.1.2 Communication

1.1.2.1 Bluetooth



Item no.: 750-921
Bluetooth® Adapter

1.1.2.2 Communication cable



Item no.: 750-923
Configuration cable; USB connector;
Length: 2.5 m



Item no.: 750-923/000-001
Configuration cable; USB connector;
Length: 5 m

1.1.3 DIN-rail

1.1.3.1 Mounting accessories



Item no.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item no.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



Item no.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



Item no.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item no.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



Item no.: 210-114
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



Item no.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item no.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



Item no.: 210-112
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



Item no.: 210-504
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



Item no.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



Item no.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.1.4 Marking

1.1.4.1 Group marker carrier



Item no.: 750-106
Group marker carrier

1.1.4.2 Marker



Item no.: 750-100
Marker card; as a DIN A4 sheet; plain



Item no.: 2009-145/000-006
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



Item no.: 2009-145/000-007
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



Item no.: 2009-145/000-023
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



Item no.: 2009-145/000-012
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



Item no.: 2009-145/000-005
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red




Item no.: 2009-145/000-024
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet




Item no.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.4.2 Marker

 <p>Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p>	 <p>Item no.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>	 <p>Item no.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>	 <p>Item no.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>
 <p>Item no.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>	 <p>Item no.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p>	 <p>Item no.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p>	 <p>Item no.: 248-501/000-024 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p>
 <p>Item no.: 248-501 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white</p>	 <p>Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p>		

1.1.4.3 Marker carrier

 <p>Item no.: 750-103 Group marker carrier</p>
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1.1.5 Shield termination

1.1.5.1 Shield clamping saddles

 <p>Item no.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm</p>	 <p>Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm</p>	 <p>Item no.: 790-116 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm</p>	 <p>Item no.: 790-216 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm</p>
 <p>Item no.: 790-124 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm</p>	 <p>Item no.: 790-220 Shield clamping saddle; 30 mm wide; 6 ... 20 mm</p>	 <p>Item no.: 790-140 Shield clamping saddle; diameter of compatible conductor</p>	

1.1.6 System enclosure

1.1.6.1 System enclosure

 <p>Item no.: 850-825 IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20</p>	 <p>Item no.: 850-826 IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip</p>	 <p>Item no.: 850-827 IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip</p>	 <p>Item no.: 850-828 IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip</p>
 <p>Item no.: 850-826/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip</p>	 <p>Item no.: 850-827/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip</p>	 <p>Item no.: 850-828/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x164 mm); 4 x M20, 10 x M16, 35 x M12 cable grip</p>	 <p>Item no.: 850-834 IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20</p>
 <p>Item no.: 850-835 IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip</p>	 <p>Item no.: 850-836 IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip</p>	 <p>Item no.: 850-814/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate</p>	 <p>Item no.: 850-815/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate</p>

1.1.6.1 System enclosure



Item no.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (400x120x200 mm); without flange plate

Item no.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035);
WxHxD (600x120x200 mm); without flange plate