

Data sheet | Item number: 750-333

Fieldbus Coupler PROFIBUS DP; 2nd Generation; 12 MBd; light gray

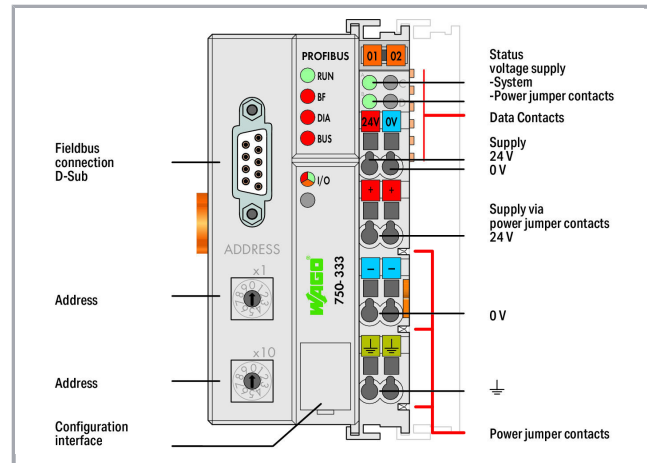
www.wago.com/750-333



RoHS
Compliant

BOMcheck.net

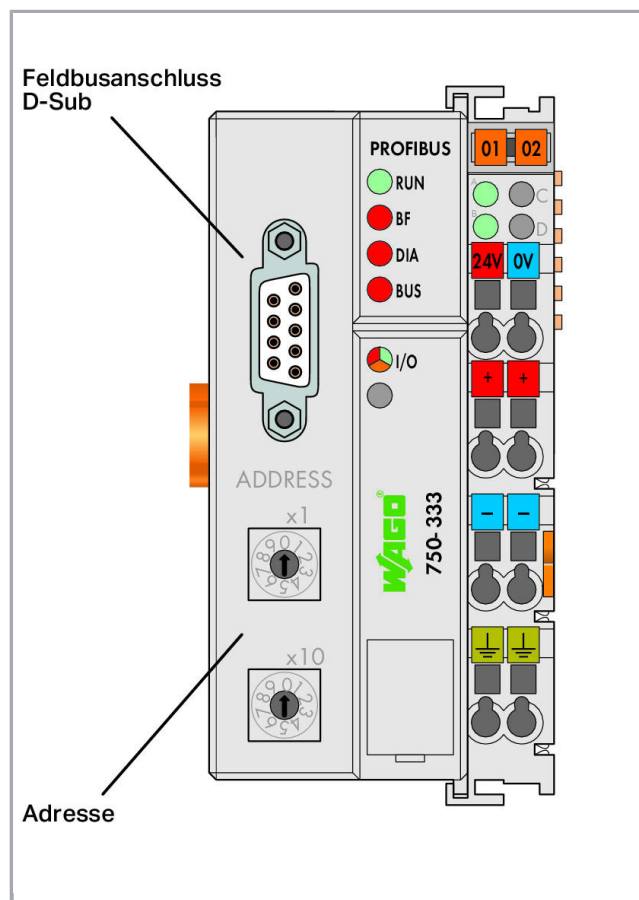
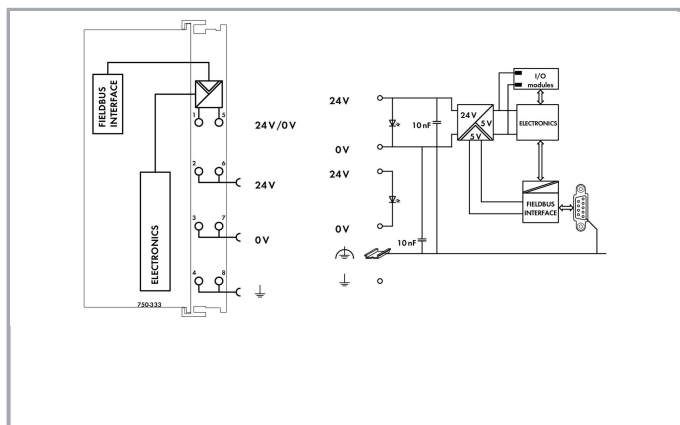
Color:



Subject to changes. Please also observe the further product documentation!

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Item description

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.

Note:

Note: Configuration files required (GSD)!

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Data

Technical Data

Communication	PROFIBUS
Number of fieldbus nodes on master (max.)	96
Number of I/O points	6,000
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 (fieldbus) process image (max.)	244 Byte/244 Byte
Supply voltage (system)	DC 24 V (-25 ... +30 %); via pluggable connector (CAGE CLAMP® connection)
Power consumption (5 V system supply)	200 mA
Total current (system supply)	1,800 mA
Supply voltage (field)	DC 24 V (-25 ... +30 %); via power jumper contacts
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 mm² / 28 ... 14 AWG
Fine-stranded conductor	0,08 ... 2,5 mm² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

Geometrical Data

Width	50,5 mm / 1.988 inch
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Height	100 mm / 3.937 inch
Depth	71,1 mm / 2.799 inch
Depth from upper edge of DIN-rail	63,9 mm / 2.516 inch

Mechanical data

Mounting type	DIN-35 rail
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Material Data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Fire load	2.779 MJ
Weight	183.1 g
Conformity marking	CE

Environmental Requirements

Surrounding air temperature (operation)	0 ... 55 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
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)
Packaging type	BOX
Country of origin	DE

Subject to changes. Please also observe the further product documentation!

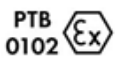
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GTIN	4045454526856
Customs tariff number	85176200000

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TÜV 07 ATEX 554086 X en.
	TUEV Nord TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 09.0001 X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- FBC750

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821926
	BV Bureau Veritas S.A.	-	13453/DO BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194

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	KR Korean Register of Shipping	-	KR HMB05880-AC001
	LR Lloyds Register	-	02/20026 (E6)
	NK Nippon Kaiji Kyokai	-	TA17255M
	PRS Polski Rejestr Statków	-	TE/2236 /880590/19
	RINA RINA Germany GmbH	-	ELE066419XG

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Counterpart

Compatible products

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Marking accessories

	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-145
	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	www.wago.com/2009-145/000-002
	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	www.wago.com/2009-145/000-005
	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	www.wago.com/2009-145/000-006
	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	www.wago.com/2009-145/000-007
	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	www.wago.com/2009-145/000-012
	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	www.wago.com/2009-145/000-023
	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	www.wago.com/2009-145/000-024
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card	www.wago.com/248-501
	Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/248-501/000-002
	Item no.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red	www.wago.com/248-501/000-005
	Item no.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	www.wago.com/248-501/000-006
	Item no.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	www.wago.com/248-501/000-007

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**Item no.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

www.wago.com/248-501/000-012**Item no.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

www.wago.com/248-501/000-017**Item no.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

www.wago.com/248-501/000-023**Item no.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

www.wago.com/248-501/000-024**Item no.: 750-100**

Marker card; as a DIN A4 sheet; plain; white

www.wago.com/750-100**Item no.: 750-103**

Group marker carrier; transparent

www.wago.com/750-103**Item no.: 750-106**

Group marker carrier; transparent

www.wago.com/750-106**wiring and connectors****Item no.: 750-960**

Fieldbus Connector PROFIBUS; with D-sub male connector; 9-pole; light gray

www.wago.com/750-960**General accessories****Item no.: 750-921**

Bluetooth® Adapter; light gray

www.wago.com/750-921**Item no.: 750-923**

Configuration cable; USB connector; Length: 2.5 m; black

www.wago.com/750-923**Item no.: 750-923/000-001**

Configuration cable; USB connector; Length: 5 m

www.wago.com/750-923/000-001**Carrier rail****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

www.wago.com/210-112**Item no.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

www.wago.com/210-113**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

www.wago.com/210-114**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

www.wago.com/210-115

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**Item no.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

www.wago.com/210-118**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

www.wago.com/210-196**Item no.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715

www.wago.com/210-197**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

www.wago.com/210-198**Item no.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715

www.wago.com/210-504**Item no.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715

www.wago.com/210-505**Item no.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715

www.wago.com/210-506**Item no.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

www.wago.com/210-508**shield connection****Item no.: 790-108**

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm

www.wago.com/790-108**Item no.: 790-116**

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

www.wago.com/790-116**Item no.: 790-124**

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

www.wago.com/790-124**Item no.: 790-140**

Shield clamping saddle; diameter of compatible conductor

www.wago.com/790-140**Item no.: 790-208**

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

www.wago.com/790-208**Item no.: 790-216**

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

www.wago.com/790-216**Item no.: 790-220**

Shield clamping saddle; 30 mm wide; 6 ... 20 mm

www.wago.com/790-220**system box****Item no.: 850-804**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

www.wago.com/850-804**Item no.: 850-804/000-001**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

www.wago.com/850-804/000-001

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**Item no.: 850-805**

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

www.wago.com/850-805**Item no.: 850-814/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

www.wago.com/850-814/002-000**Item no.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

www.wago.com/850-815/002-000**Item no.: 850-816/002-000**

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

www.wago.com/850-816/002-000**Item no.: 850-817/002-000**

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

www.wago.com/850-817/002-000**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

www.wago.com/850-825**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

www.wago.com/850-826**Item no.: 850-826/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

www.wago.com/850-826/002-000**Item no.: 850-827**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

www.wago.com/850-827**Item no.: 850-827/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

www.wago.com/850-827/002-000**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

www.wago.com/850-828**Item no.: 850-828/002-000**

IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

www.wago.com/850-828/002-000**Item no.: 850-834**

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

www.wago.com/850-834**Item no.: 850-835**

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

www.wago.com/850-835**Item no.: 850-836**

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

www.wago.com/850-836

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Downloads

Documentation

Manual

PROFIBUS DP/ V1 Fieldbus Coupler EN 50170, 12 MBaud, digital and analog signals	V 1.2.0	pdf 7.6 MB	Download
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Bid Text

750-333 doc - Datei	Jul 21, 2017	doc 29.2 kB	Download
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750-333 GAEB X81 - Datei	Feb 19, 2019	xml 6.2 kB	Download
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System Description

Design Notes Basic conditions and recommendations for higher operational safety	V 2.0.0	pdf 1.5 MB	Download
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750/753 Series I/O-System – General Product Information		pdf 1.7 MB	Download
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Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download
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Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
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Application Notes

Application Note CoDeSys 2.3

HART Tool Routing via PROFIBUS with 750-833 and 750-333 (a116140) This application note describes how to set up asset management systems, which facilitate simple, efficient configuration of HART field devices. Using the Cerabar PMC51 (Endress+Hauser) as an example, connecting any HART sensor to a WAGO PROFIBUS controller and a WAGO PROFIBUS Coupler is explained. The cyclic PROFIBUS Master (750-8208) realizes the data exchange. As an acyclic master, a TH LINK PROFIBUS provides access for the plant asset management applications WAGOframe, PACTware and FieldCare.	1.0.0 Mar 22, 2019	pdf 5.3 MB	Download
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Application note SIEMENS

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PROFIBUS DP & PROFINET IO Diagnose für Siemens CPU 300 & 400 (a100210) PROFIBUS DP & PROFINET IO Diagnosebausteine für eine Siemens CPU 300/400. Ebenfalls ist ein Baustein zum De-/Aktivieren einzelner Devices am Bus enthalten.	V2.0.0 Oct 7, 2015	zip 4.0 MB	Download
PROFIBUS DP & PROFINET IO Diagnose für Siemens CPU 1200 & 1500 (a100211) PROFIBUS DP & PROFINET IO Diagnosebausteine für eine Siemens CPU 1200/1500. Ebenfalls ist ein Baustein zum De-/Aktivieren einzelner Devices am Bus enthalten.	V2.1.0 Dec 3, 2019	zip 7.5 MB	Download
Using iPar-Server option with WAGO PROFIsafe modules (a114802) Use of WAGO PROFIsafe modules V2 iPar under Siemens safety controllers with the technologies iPar-Server and TCI. Supported surfaces Step 7 Classic from V5.5, TIA V14 SP1, TIA V15, TIA V15.1 and TIA V16 in combination with CPU 3xxF, 4xxF and 1xxxF.	V 11.02 Jun 4, 2020	zip 218.2 MB	Download

Runtime Software

Firmware

Firmware: 750-333 Fieldbus Coupler PROFIBUS DP; 2nd Generation; 12 MBd; light gray	21 Jun 4, 2019	zip 439.5 kB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 750-333	URL	Download
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CAE data

EPLAN Data Portal 750-333	URL	Download
WSCAD Universe 750-333	URL	Download

Device Files

Device Description File

EDD Datei für SIMATIC PDM für 750-333, 750-833, 750-482, 750-484	1.0 Nov 22, 2010	zip 185.2 kB	Download
750-910; GSD files for PROFIBUS / 750, 752, 755, 758 and 767 Series	6.4 Nov 15, 2019	zip 4.9 MB	Download

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Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857

6.5.3.0
Sep 10, 2014

zip
4.8 MB

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Installation Notes

Product family

750/753 Series – I/O System

[Show all products from the family](#)

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