

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

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Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

Item description

The EtherCAT® Fieldbus Coupler connects EtherCAT® to the modular WAGO I/O System.

The fieldbus coupler detects all connected I/O modules and creates a local process image. This process image may include a mixed arrangement of analog (word-by-word data transfer) and digital (bit-by-bit data transfer) modules.

The upper EtherCAT® interface connects the coupler to the network. The lower RJ-45 socket may connect 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.

Data

Technical data

Communication	EtherCAT®
Baud rate	100 Mbit/s
Transmission medium	Shielded twisted pair S/FTP, F/FTP or SF/FTP; 100 Ω; Cat. 6
Transmission performance	Class D per EN 50173
Number of modules per node (max.)	64
Input and output process image (fieldbus) max.	1024 bytes/1024 bytes
Supply voltage (system)	24 VDC (-25 ... +30 %); via pluggable connector
Current consumption (5 V system supply)	300 mA
Total current (system supply)	700 mA
Input current (typ.) at nominal load (24 V)	250 mA
Power supply efficiency (typ.) at nominal load (24 V)	85 %
Isolation	500 V system/field

Connection data

Connection technology: communication/fieldbus	EtherCAT: 2 x RJ-45
Connection technology: system supply	2 x CAGE CLAMP®
Connection technology: device configuration	1 x Male connector; 4-pole
Connection type 1	System supply
Solid conductor	0.08 ... 1.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
Note (conductor cross-section)	14 AWG: THHN, THWN

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Physical data

Width	49.5 mm / 1.949 inches
Height	96.8 mm / 3.811 inches
Depth	71.9 mm / 2.831 inches
Depth from upper-edge of DIN-rail	64.7 mm / 2.547 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	1.421 MJ
Weight	102.9 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree	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	per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-3
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

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Commercial data

Product Group	15 (I/O System)
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 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821086819
Customs tariff number	85176200000

Environmental Product Compliance

CAS-No.	12060-00-3 1317-36-8 693-98-1 7439-92-1
REACH Candidate List Substance	2-methylimidazole Lead Lead monoxide Lead titanium oxide (PbTiO3)
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	22ee26a1-447b-4ba7-8267-13d51677fa36
SCIP notification number (Belgium)	a2998941-30e6-435b-8f5f-8c622403232d
SCIP notification number (Bulgaria)	281439ff-f828-471c-8190-72f315c3b32e
SCIP notification number (Czech Republic)	f657f45e-c15d-4aa0-9160-58b33462aa92
SCIP notification number (Denmark)	c03dc87-ce23-400c-b85e-50967f7de35c
SCIP notification number (Finland)	350bbcad-00c1-4a58-8b05-492f05b21aaa
SCIP notification number (France)	1680cfaf-befc-446a-8aba-82a922f19e53
SCIP notification number (Germany)	7b63a9d3-5033-45ae-a90d-9cca18c18e0c
SCIP notification number (Hungary)	ed271240-453b-4ae4-8bb5-9a8ea79d2aed
SCIP notification number (Italy)	5b94ec8a-79ab-4a0e-b4a6-a8e1f3db54f6
SCIP notification number (Netherlands)	5ffd0694-80a9-4004-aa62-7ec550154156
SCIP notification number (Poland)	44709505-2226-4b16-b5ab-ca6fe1299a9e

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SCIP notification number (Romania)	11a73ef4-aac5-4571-b8d8-dc2166ec3bd0
SCIP notification number (Sweden)	85bb0c6c-ea7e-4706-b6b7-fb2748af0e31

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
	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
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_14_ATEX_148929_X (II 3 G Ex ec IIC T4 Gc)
	CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)

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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



UKEx

WAGO GmbH & Co. KG

EN 60079-0

UKCA_WAGO22UKEX003X_ec



UL

Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)

UL 121201

E198726 Sec.1

Optional accessories

Communication

Communication cable



Item no.: 750-923

Configuration cable; USB connector; Length: 2.5 m

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

Marking accessories

Marker



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

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

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Item no.: 2009-145/000-007 [www.wago.com/2009-145
/000-007](http://www.wago.com/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.: 2009-145/000-005 [www.wago.com/2009-145
/000-005](http://www.wago.com/2009-145/000-005)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red

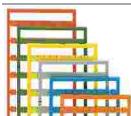
Item no.: 2009-145/000-012 [www.wago.com/2009-145
/000-012](http://www.wago.com/2009-145/000-012)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange

Item no.: 2009-145/000-023 [www.wago.com/2009-145
/000-023](http://www.wago.com/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.: 2009-145/000-024 [www.wago.com/2009-145
/000-024](http://www.wago.com/2009-145/000-024)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



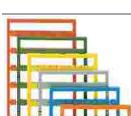
Item no.: 248-501/000-006 [www.wago.com/248-501
/000-006](http://www.wago.com/248-501/000-006)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



Item no.: 248-501/000-007 [www.wago.com/248-501
/000-007](http://www.wago.com/248-501/000-007)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



Item no.: 248-501/000-002 [www.wago.com/248-501
/000-002](http://www.wago.com/248-501/000-002)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow



Item no.: 248-501/000-012 [www.wago.com/248-501
/000-012](http://www.wago.com/248-501/000-012)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



Item no.: 248-501 www.wago.com/248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item no.: 248-501/000-017 [www.wago.com/248-501
/000-017](http://www.wago.com/248-501/000-017)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



Item no.: 248-501/000-005 [www.wago.com/248-501
/000-005](http://www.wago.com/248-501/000-005)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

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**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.: 248-501/000-023**

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

www.wago.com/248-501/000-023**Carrier rail****Mounting accessories****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

www.wago.com/210-197**Item no.: 210-198**

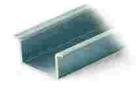
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored

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; silver-colored

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; silver-colored

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; silver-colored

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; silver-colored

www.wago.com/210-508**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

www.wago.com/210-113**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

www.wago.com/210-118**Item no.: 210-112**

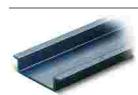
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm"; silver-colored

www.wago.com/210-112**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

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"; silver-colored

www.wago.com/210-115**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

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Shield termination

Shield clamping saddles

	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.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm	www.wago.com/790-108
	Item no.: 790-140 Shield clamping saddle; diameter of compatible conductor	www.wago.com/790-140
	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
	Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	www.wago.com/790-208

Cables and pluggable connectors

Connector plug

	Item no.: 750-975 ETHERNET RJ-45 connector, IP20; ETHERNET 10/100 Mbit/s; for field assembly	www.wago.com/750-975
	Item no.: 750-978/000-012 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22; Strain relief	www.wago.com/750-978/000-012
	Item no.: 750-979/000-012 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 22; Strain relief	www.wago.com/750-979/000-012
	Item no.: 750-978/000-021 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24; Strain relief	www.wago.com/750-978/000-021
	Item no.: 750-979/000-022 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568B; AWG 24; Strain relief	www.wago.com/750-979/000-022
	Item no.: 750-978/000-022 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24; Strain relief	www.wago.com/750-978/000-022
	Item no.: 750-979/000-011 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 22; Strain relief	www.wago.com/750-979/000-011

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	Item no.: 750-979/000-021 Connector ETHERNET; RJ-45; Cat. 6A; angled; Code T568A; AWG 24; Strain relief	www.wago.com/750-979/000-021
	Item no.: 750-977/000-011 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22	www.wago.com/750-977/000-011
	Item no.: 750-978/000-011 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 22; Strain relief	www.wago.com/750-978/000-011
	Item no.: 750-977/000-022 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 24	www.wago.com/750-977/000-022
	Item no.: 750-977/000-012 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568B; AWG 22	www.wago.com/750-977/000-012
	Item no.: 750-977/000-021 Connector ETHERNET; RJ-45; Cat. 6A; straight; Code T568A; AWG 24	www.wago.com/750-977/000-021
System housing		
System enclosure		
	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.: 850-827 IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827

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	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.: 850-826/002-000 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.: 850-828/002-000 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.: 850-828 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.: 850-834 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

Downloads

Documentation

Manual

System Manual WAGO I/O System 750/753 Decentralized Automation Technology	V 3.3.0 2023 May 4	pdf 8.8 MB	Download
Product Manual EtherCAT Fieldbus Coupler 100 Mbit/s; digital and analog signals	V 1.3.1	pdf 6.9 MB	Download
System Manual Series 750/753 Online HTML		URL	Download

Bid Text

750-354 X81 - Datei	2019 Feb 19	xml 5.7 kB	Download
750-354 doc - Datei	2017 Jul 21	doc 30.2 kB	Download

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Instruction Leaflet

CCC Ex (Additional information) WAGO-I/O-SYSTEM *750-****/*	2023 Apr 26	pdf 163.6 kB	Download
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System Description

Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 789.0 kB	Download
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750/753 Series I/O-System – General Product Information	pdf 1.7 MB	Download
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Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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Application Notes

Application note, other

WAGO EtherCAT Coupler with TwinCAT 2.x (a116900) This document illustrates the various steps taken to configure a TwinCAT 2.x PLC with a node of WAGO Series 750-354. This document should serve as a supplement to the appropriate WAGO EtherCAT product manual when installing and/or commissioning a node of WAGO Series 750-354.	1.0.0 2011 Jan 5	zip 666.2 kB	Download
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WAGO EtherCAT Coupler with CoDeSys SP (a116901) This document illustrates the various steps taken to configure a CoDeSys SP win v3 PLC with a node of WAGO Series 750-354. This document should serve as a supplement to the appropriate WAGO EtherCAT product manual when installing and/or commissioning a node of WAGO Series 750-354. The major steps are - Install CoDeSys IDE and "SP win V3". - Install winPcap. - Edit configuration file "CoDeSysSP.cfg". - Update "Device Repository" with "WAGO_750-354.xml". - Create a new CoDeSys project. - Add EtherCAT-Master device. - Add EtherCAT-Slave device 750-354. - Set EtherCAT params. - Map PDO-Content to PLC-Variables. - Compile, download and start PLC-Program.	1.1.2 2011 Jan 5	zip 4.4 MB	Download
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Application Note e!COCKPIT

e!COCKPIT Application Note EtherCAT IO-Field (a2022003) WAGO EtherCAT Master, EoE access with IO-Field devices	1.0.0 2023 Mar 23	pptx 2.2 MB	Download
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Runtime Software

Firmware

0750-0354, Feldbuskoppler EtherCAT WAGO_FW0750-0354_V010307_IX05_S	V 05 2021 Oct 19	zip 682.2 kB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 750-354	URL	Download
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CAE data

WSCAD Universe 750-354	URL	Download
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ZUKEN Portal 750-354	URL	Download
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EPLAN Data Portal 750-354	URL	Download
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Device Files

Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 2014 Sep 10	zip 4.8 MB	Download
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Device Description File

(750-909) ESI file for EtherCAT 750 Series	24 2022 Oct 4	zip 115.1 kB	Download
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Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-354 Fieldbus Coupler EtherCAT	URL	Download
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Installation Notes

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Product family

WAGO I/O System 750/753

[Show all products from the family](#)

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Do you have any questions about our products?
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