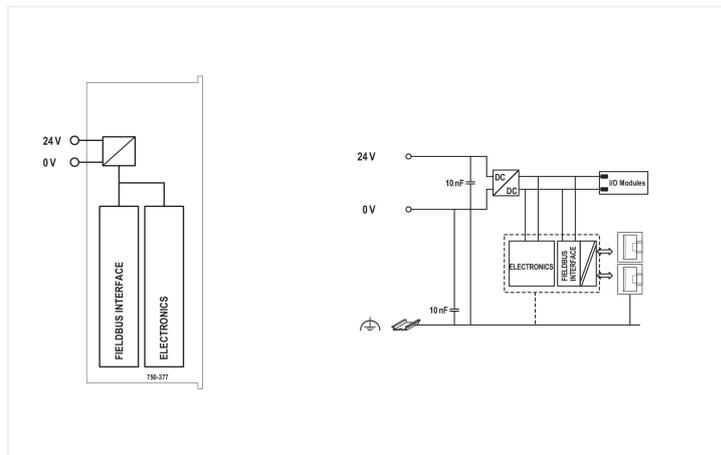
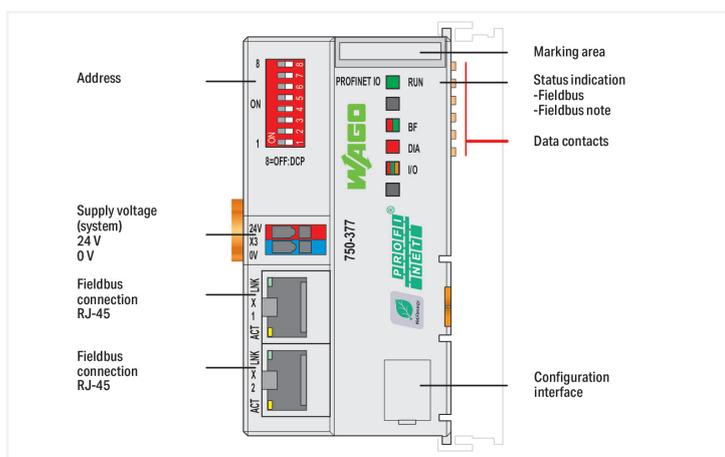


Data Sheet | Item Number: 750-377
Fieldbus Coupler PROFINET IO; 3rd Generation; ECO Advanced

<https://www.wago.com/750-377>



Color: ■ light gray



This 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 I/O controller and one I/O supervisor according to preset configurations. This process image may include a mixed arrangement of analog (word-by-word data transfer) or complex modules and digital (bit-by-bit data transfer) modules. The fieldbus coupler operates as an I/O 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 a default name can be instantiated via DIP switch.

Technical data

Communications	PROFINET IO
Device-specific	Supported profiles: PROFIsafe V2, PROFINergy V1.0; ID code: Vendor ID: 0x011D; Device ID: 0x02EE; Module ID: 0x01000177 (firmware version 01, 02), 0x02000177 (from firmware version 03)
PROFINET IO features	Integrierter 2-Port-Switch; Autonegotiation; Auto-MDIX; isochrone Echtzeitkommunikation; Sendetakt: 1 ms (RT); 1, 2, 4 ms (IRT); Gerätetausch ohne Programmiergerät
Transmission rate	10/100 Mbit/s ((10 Mbit/s (ETHERNET protocols), 100 Mbit/s full duplex (PROFINET IO)))
Bus segment length (max.)	100 m
Transmission medium (communication/fieldbus)	Twisted pair S-UTP; 100 Ω; Cat. 5
Number of modules per node (max.)	64
Number of modules without a bus extension (max.)	64
Input and output process image (fieldbus) max.	256 bytes/256 bytes
Supply voltage (system)	24 VDC (-25 ... +30 %); via pluggable connector
Current consumption (5 V system supply)	450 mA
Total current (system supply)	700 mA
Input current (typ.) at nominal load (24 V)	280 mA
Power supply efficiency (typ.) at nominal load (24 V)	90 %

Technical data

Isolation	500 V system/field
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Connection data

Connection technology: communication/fieldbus	PROFINET IO: 2 x RJ-45
Connection technology: system supply	2 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type 1	System supply
Solid conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
Connection technology: device configuration	1 x Male connector; 4-pole

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	1.438 MJ
Weight	107.1 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 left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
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 61000-6-3, 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 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821687443
Customs tariff number	8517620000

Product classification

UNSPSC	32151705
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Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 693-98-1 7439-92-1
REACH Candidate List Substance	2-methylimidazole Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	8e50993b-352f-4caf-b004-7e9bce6f15bb
SCIP notification number (Belgium)	a14f6ab6-06ac-4c61-98a2-5c189db49153
SCIP notification number (Bulgaria)	2a37af0c-f34d-4aed-afec-3f07e855fd3a
SCIP notification number (Czech Republic)	4533a93d-d469-4c73-8f02-f71b1d908549
SCIP notification number (Denmark)	d80e9460-6e10-4c56-9fe2-521065092b5a
SCIP notification number (Finland)	a863a644-f00a-44c2-8803-845c28ed6d3a
SCIP notification number (France)	d2bd405c-a678-4596-9082-85dc4e946173
SCIP notification number (Germany)	92183a6e-26ea-470d-aff7-cc025a1b5463
SCIP notification number (Hungary)	b146cca2-9aec-44c2-9ab9-34650969996e
SCIP notification number (Italy)	c2952b09-a026-4fb2-bdc1-29d0d10f0151
SCIP notification number (Netherlands)	1184562c-de93-4a45-ad62-0783d6050495
SCIP notification number (Poland)	566db317-8dbc-4015-b228-7d4e34300976
SCIP notification number (Romania)	b746bece-b994-46d0-be97-e360b08af70e
SCIP notification number (Sweden)	8583835a-b794-43b9-92a9-38cb252241c7

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-FBC750
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
DNV DNV GL SE	DNV-CG-0339, Aug. 2021	TAA0000194
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEX CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TUV Rheinland do Brasil Ltda.	IEC 60079-0	TUV 12.1297 X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	20-KA4BO-0109X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-377 ↓

Documentation

Manual			
System Manual Series 750/753			↓
Product Manual PROFINET IO advanced ECO Fieldbus Coupler	V 1.3.1 17.08.2020	pdf 7755.31 KB	↓

System Description			
750/753 Series I/O-System – General Product Information		pdf 953.35 KB	↓
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 770.48 KB	↓

Bid Text			
750-377	21.07.2017	doc 31.50 KB	↓
750-377	19.02.2019	xml 6.79 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	↓

Application Notes

Application note SIEMENS

Using iPar-Server option with WAGO PROFI-safe modules (a114802)	V 14.1 07.02.2023	zip 130043.55 KB	↓
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CAD/CAE-Data

CAD data	CAE data
2D/3D Models 750-377 ↓	EPLAN Data Portal 750-377 ↓
	WSCAD Universe 750-377 ↓
	ZUKEN Portal 750-377 ↓

Runtime Software

Firmware
0750-0377, Feldbus-koppler PROFINET IO V 11 24.01.2023 zip 879.92 KB ↓

Libraries

Device Description File
750-919; EDS file for Ethernet/IP / 750-363, 750-366, 750-823, 750-893 1.7 14.06.2023 zip 17.38 KB ↓
750-916; GSD files of version 2.x for PROFINET/ series 750/753, 765, 767 and 852 3.0 15.01.2023 zip 2582.40 KB ↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors

1.1.1.1 Connector plug



[Item No.: 750-979/000-013](#)
Connector PROFINET; RJ-45; Cat. 6A; angled; AWG 22; Strain relief



[Item No.: 750-977/000-013](#)
Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22



[Item No.: 750-978/000-013](#)
Connector PROFINET; RJ-45; Cat. 6A; straight; AWG 22; Strain relief



[Item No.: 750-976](#)
PROFINET RJ-45 connector, IP20; ETHER-NET 10/100 Mbit/s; for field assembly

1.1.2 Communication

1.1.2.1 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 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



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

Item No.: 248-501/000-006

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

Item No.: 248-501/000-007

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

Item No.: 248-501/000-023

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



Item No.: 248-501/000-017

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

Item No.: 248-501/000-012

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

Item No.: 248-501/000-005

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

Item No.: 248-501/000-024

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



Item No.: 248-501

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

Item No.: 248-501/000-002

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

1.1.5 Shield termination

1.1.5.1 Shield clamping saddles



Item No.: 790-108

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



Item No.: 790-208

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



Item No.: 790-116

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



Item No.: 790-216

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



Item No.: 790-124

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



Item No.: 790-220

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



Item No.: 790-140

Shield clamping saddle; diameter of compatible conductor

1.1.6 System enclosure

1.1.6.1 System enclosure



Item No.: 850-825

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



Item No.: 850-826

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



Item No.: 850-827

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



Item No.: 850-828

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



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



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



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



Item No.: 850-834

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



Item No.: 850-835

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



Item No.: 850-836

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



Item No.: 850-814/002-000

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



Item No.: 850-815/002-000

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



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