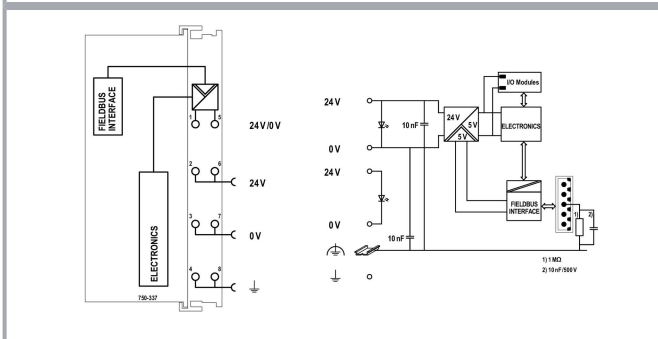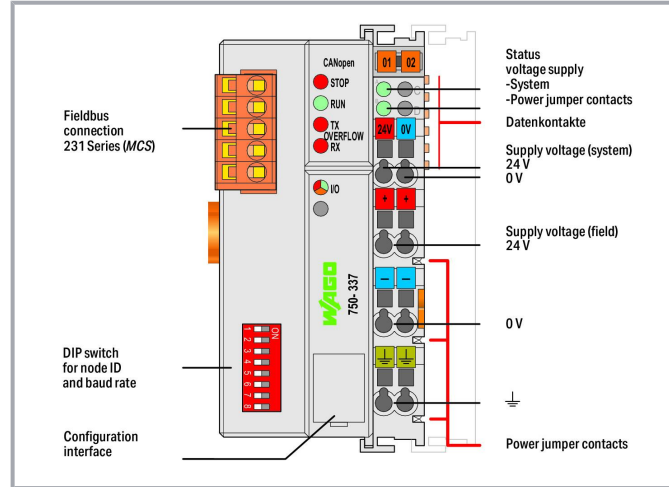Color:

Item description

This fieldbus coupler connects the WAGO I/O System as a slave to the CANopen fieldbus. Data is transmitted via PDOs and SDOs.

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

Do you have any questions about our products?
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The fieldbus coupler detects all connected I/O modules and creates a local process image. 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 bus to a control system for further processing. The process output data is sent via the CANopen bus.

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

All entries of the object directory can be mapped as required 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.

Data
Notes

Note	
	Note: Configuration files required (EDS)!

Technical data

Communication	CANopen
Number of fieldbus nodes on master (max.)	110
Baud rate	10 kBd … 1 MBd
Bus segment length (max.)	1000 m
Transmission medium	Shielded Cu cable 3 x 0.25 mm²
Number of modules per node (max.)	64
Other CANopen features	NMT slave Minimum boot-up Variable PDO mapping Emergency message Life guarding Virtual module configuration
Number of PDOs	32 Tx / 32 Rx
Number of SDOs	2 SDO servers
COB ID distribution	SDO, standard
Node ID distribution	DIP switch
Communication profile	DS-301 V4.1
Device profile	DS-401 V2.0 Limit value monitoring

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

	Edge-triggered PDOs
	Configurable response in the event of an error
Input and output process image (fieldbus) max.	512 bytes/512 bytes
Supply voltage (system)	24 VDC (-25 … +30 %); via pluggable connector (CAGE CLAMP® connection)
Current consumption (5 V system supply)	350 mA
Total current (system supply)	1,650 mA
Supply voltage (field)	24 VDC (-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

Connection data

Connection technology: communication/fieldbus	CANopen: 1 x Male connector; 5-pole
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 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

Material Data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6

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

Fire load	3.374 MJ
Weight	184 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	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_2S 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)
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	4045454526900
Customs tariff number	85176200000

Environmental Product Compliance

CAS-No.	12060-00-3
	1303-86-2

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

	1317-36-8	
	7439-92-1	
	79-94-7	
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol	
	Diboron trioxide	
	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 (Bulgaria)	f01fb8e5-1938-4140-a5f1-6a76d6cf3311	
SCIP notification number (Czech Republic)	4ba18801-d760-496e-801f-12742930c4ff	

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
CCC	**CCC** CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
EAC	**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	**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
CE	**EU-Declaration of Conformity** WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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

UK
CA

Approvals for marine applications

| Logo	Approval	Additional Approval Text	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 GL SE	DNV-CG-0339,Aug.2021	TAA0000194
	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

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)

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

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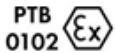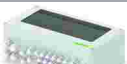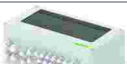
	CCC CNEX	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02.B.00163 /19 (2Ex nA IIC T4 Gc X)
	IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
	INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
	UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WAGO22UKEX003X_ec
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Optional accessories

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

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

	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

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
	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

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	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

Carrier rail

Mounting accessories

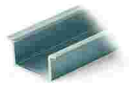|	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored	www.wago.com/210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	www.wago.com/210-198
	Item no.: 210-504 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

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

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

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 carrier

Item no.: 750-103
Group marker carrier

www.wago.com/750-103

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

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.: 2009-145/000-005
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.: 2009-145/000-012
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

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

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

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.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

www.wago.com/248-501
/000-012

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

www.wago.com/248-501

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.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

www.wago.com/248-501
/000-005

Item no.: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

www.wago.com/248-501
/000-024
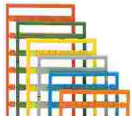
Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

www.wago.com/248-501
/000-023

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

www.wago.com/750-100

Group marker carrier

Item no.: 750-106
Group marker carrier

www.wago.com/750-106

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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 CANopen Fieldbus Coupler, MCS 10 kBaud -1 MBaud, digital and analog signals, MSS fieldbus connection / 10 kBaud -1 MBaud, digital and analog signals	V 4.1.0	pdf 8.6 MB	Download
System Manual Series 750/753 Online HTML		URL	Download

Bid Text

750-337 X81 - Datei	2019 Feb 19	xml 7.4 kB	Download
750-337 doc - Datei	2017 Jul 21	doc 31.7 kB	Download

Instruction Leaflet

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

System Description

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

Additional Information

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

Application Notes

Application Note CoDeSys 2.3

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Using the Profile401_1 library for data exchange between WAGO CANopen devices (a112600)	1.0.0 2003 May 19	zip 329.3 kB	Download

This document describes how to use the library Profile401_1 for setting up the data exchange between different WAGO devices on a CANopen network. It is assumed, that one 750-837 CANopen controller acts as the network manager while one or more 750-337 or 750-347 CANopen buscouplers exchange data with the network manager.

Runtime Software

Firmware

0750-0337, Feldbuskoppler CANopen; MCS WAGO_FW0750-0337_V012900_IX23_S	V 23 2021 Oct 18	zip 730.7 kB	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 750-337		URL	Download

WSCAD Universe 750-337		URL	Download

ZUKEN Portal 750-337		URL	Download

CAD data

2D/3D Models 750-337		URL	Download

Device Files

Device Description File

750-914; EDS file for CANopen / 750, 752 and 767 Series	XT 2021 Mar 12	zip 1.8 MB	Download

Device Driver

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

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

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-337	URL	Download
Fieldbus Coupler CANopen; MCS		

Installation Notes

Product family

WAGO I/O System 750/753
Show all products from the family

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