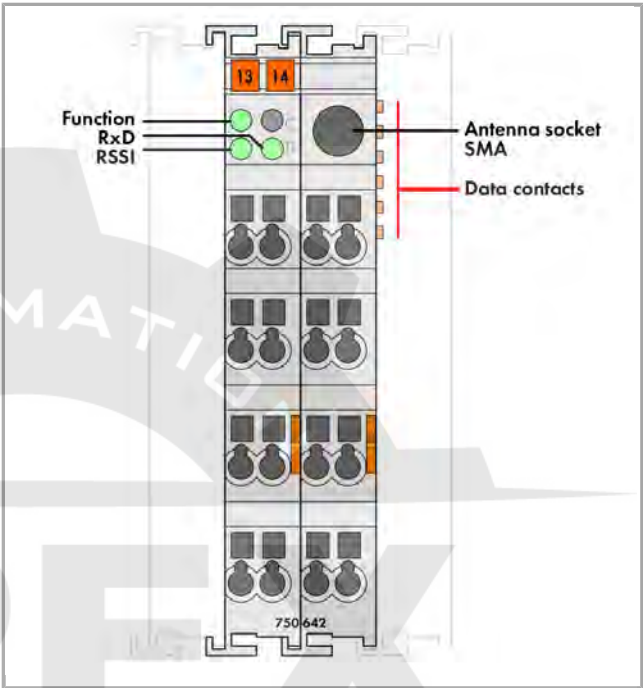


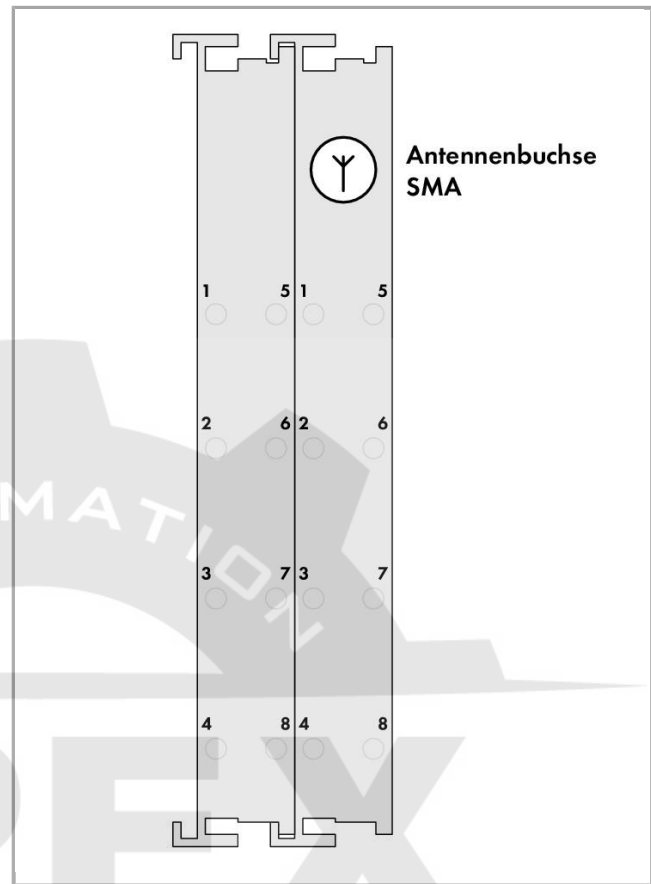
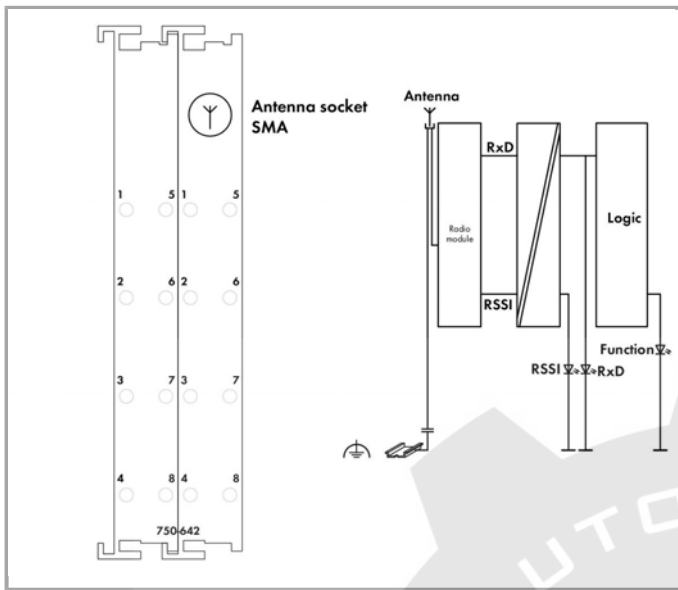


750-642



RoHS
Compliant

BOMcheck.net



Item description

The 750-642 I/O Module receives radio telegrams from maintenance-free, battery-less and wireless switches and sensors based on EnOcean radio technology.

The module can be used with any controller of the WAGO-I/O-SYSTEM 750. Preprogrammed function blocks make integration easy.

The energy required for switch or sensor operation is produced by converting one type of energy (heat, solar or mechanical energy) into usable electrical energy. The radiated energy from the transmitter modules is around one million times smaller than mobile phones. Almost any number of sensors is possible. However, the maximum number is around 100 transmitters per module, due to the increasing density of switches/sensors.

Four billion code numbers provide for clear transmitter/receiver assignment. Repeated, time-shifted transmission of the radio telegrams, at very short transmission times, results in a high level of protection against external interference.

The maximum transmission range is approx. 300 meters in open field. Depending on the building materials used and on the spatial geometry, the range may be reduced to typically 30 meters (see manual for more information). The LED (RSSI) indicates a sufficient input level.

*Documentation available in German and English.

An SMA socket which is integrated into the housing allows the connection of an external antenna. The 758-910 external antenna has a magnetic stand and a 2.5m long coax cable with SMA plug (available as an accessory).

Data

Technical Data

Wireless technology	EnOcean
Frequency band	868.3 MHz
Transmission range	300 m in open field (typ. in buildings see manual)
Bit width	1 x 24-bit input/output (3-byte user data); 1 x 8-bit control/status
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	80 mA
Isolation	500 V antenna connection/system

Connection data

Connection technology: Antenna	1 x SMA socket
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Geometrical Data

Width	24 mm / 0.945 inch
Height	72 mm / 2.835 inch
Height from upper-edge of DIN-35 rail	64.8 mm / 2.551 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
------------------	-------------

Material Data

Housing material	Polycarbonate, polyamide 6.6
Fire load	2.125 MJ
Weight	86.475 g
Conformity marking	1
Conformity marking RTTE	www.wago.com

Environmental Requirements

Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6

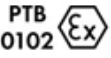
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (Remote I/O)
Country of origin	DE
GTIN	4045454509583
Customs Tariff No.	85389099990

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)	ANSI/ISA 12.12.01	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- RFM750

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL	UL 508	E175199



UL International Netherlands B.V. (ORDINARY
LOCATIONS)

Sec.1

Compatible products

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	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	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	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	210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	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	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	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	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	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	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	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	210-508

shield connection

	Item no.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor	790-108
	Item no.: 790-116 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	790-116

**Item no.: 790-124**

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

790-124

**Item no.: 790-140**

Shield clamping saddle; diameter of compatible conductor

790-140

**Item no.: 790-208**

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

790-208

**Item no.: 790-216**

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

790-216

**Item no.: 790-220**

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

790-220

General accessories**Item no.: 758-910**

Magnetic foot antenna, GSM 900/1800; External antenna

758-910

Marking accessories**Item no.: 2009-145**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

2009-145

**Item no.: 2009-145/000-002**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-002

2009-145

**Item no.: 2009-145/000-005**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-005

2009-145

**Item no.: 2009-145/000-006**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-006

2009-145

**Item no.: 2009-145/000-007**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-007

2009-145

**Item no.: 2009-145/000-012**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-012

2009-145

**Item no.: 2009-145/000-023**

Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-023

2009-145

**Item no.: 2009-145/000-024**

Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type

/000-024

2009-145

**Item no.: 248-501**

Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

248-501

**Item no.: 248-501/000-002**

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

/000-002

248-501



Item no.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-005

248-501



Item no.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-006

248-501



Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-007

248-501



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-012

248-501



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-017

248-501



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

/000-023

248-501



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

/000-024

248-501



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

750-100



Item no.: 750-103
Group marker carrier

750-103



Item no.: 750-106
Group marker carrier

750-106

system box



Item no.: 850-804
IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

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

/000-001

850-804



Item no.: 850-805
IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

850-805



Item no.: 850-814/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

/002-000

850-814



Item no.: 850-815/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

/002-000

850-815



Item no.: 850-816/002-000
IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

/002-000

850-816

**Item no.: 850-817/002-000**

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

/002-000

850-817

**Item no.: 850-825**

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

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

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

/002-000

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

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

/002-000

850-827

**Item no.: 850-828**

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

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

/002-000

850-828

**Item no.: 850-834**

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

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

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

850-836

Downloads

Documentation

Manual

EnOcean Radio Receiver	V 1.1.0	pdf 1.1 MB	Download
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Bid Text

750-642 IO-Klemmen	Apr 4, 2012	doc 27.6 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf	Download
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265.8 kB

System Description

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

Application Notes

Application Note CoDeSys 2.3

Application Note: EnOcean_06 Library	Nov 30, 2016	zip	Download
This application note describes how communication between the WAGO-I/O-SYSTEM and different EnOcean wireless sensors can be implemented using the EnOcean_06.lib library.		842.0 kB	

Libraries

Library

Bibliotheken für die Gebäudeautomation CODESYS 2.3	Apr 25, 2019	zip	Download
In dieser Zip-Datei sind WAGO I/O PRO Bibliotheken für die Automation von Gebäuden enthalten. Es sind Bausteine für folgende Applikationen verfügbar: - DALI - DALI Sensoren - DALI Colour Control (Farbsteuerung) - DALI Emergency Lighting - EnOcean - SMI - HLK / HVAC Funktionen - Allgemeine Gebäudedefunktionen wie Jalousie, Dimmer, Stromstoßschalter - Zeitschaltfunktionen (Scheduler) - KNX Funktionsbausteine - BACnet - WINSTA Jalousiebox - DMX - Wetterstation Elsner - M-Bus, MBus - MP-Bus, MPBus - Romutec Handbedienung - Thermokon Thanos Raumbediengerät - Thermokon WRF06 Raumbediengerät - Thermokon WRF08 Raumbediengerät - 3-Phasen-Leistungsmessklemme 750-493 - LON - Grundfos Pumpen mit GENIbus Interface		74.2 MB	

e!COCKPIT libraries

e!COCKPIT library description WagoAppEnOcean		pdf	Download
		3.1 MB	

**CAD/CAE - Smart Data****CAD data**

3D Download 750-642	URL	Download
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Device Files**Device Driver**

WAGO USB Service Cable Driver / 750 and 857 Series	6.5.3.0	zip	Download
759-923	Sep 10, 2014	4.8 MB	

Product family

750/753 Series I/O-System
[Learn more about the product family.](#)

[Show all products from the family](#)