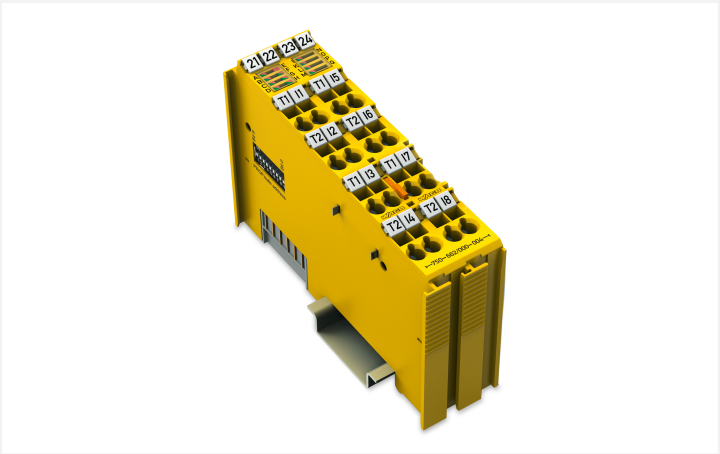
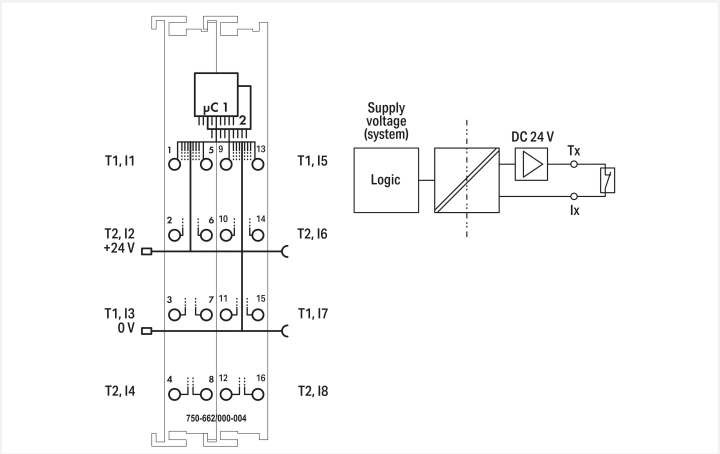
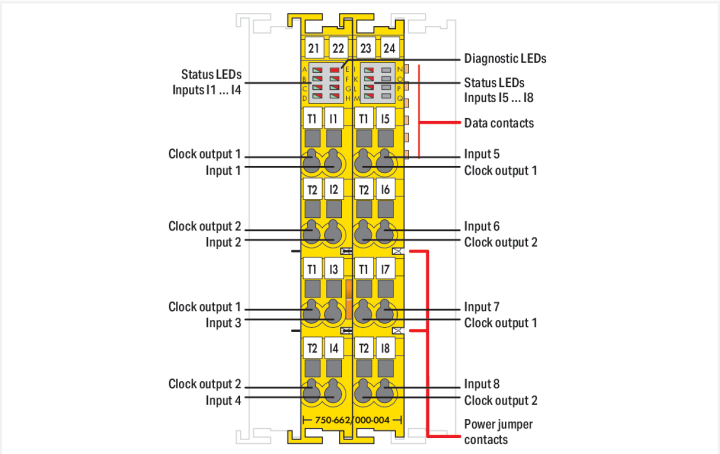
Data Sheet | Item Number: 750-662/000-004

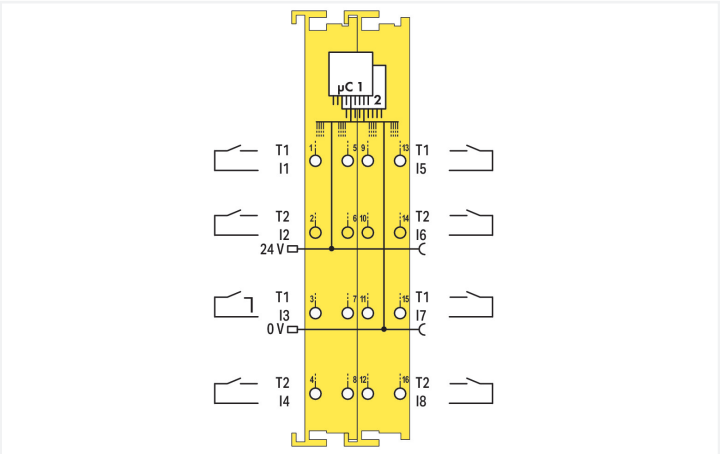
Fail-safe 8-channel digital input; 24 VDC; PROFIsafe

https://www.wago.com/750-662/000-004









The PROFIsafe Module (75x-662/000-004) connects to potential-free emergency stop buttons with contacts, safety interlock switches, operating mode switches, safety sensors and semiconductor outputs.
The module features eight clock-sensitive inputs (I1 ... I8) that are fed via two differently clocked outputs (T1 ... T2).
Clock outputs are short-circuit-protected. Inputs are continually monitored for cross circuits and power supply from separate sources. Additional safety-relevant parameters (e.g., operating modes, switching off test pulses, discrepancy or filter times) can be configured via WAGO-I/O-*CHECK*.
The configuration tool can be conveniently integrated into engineering systems supporting both CC2 and CC3 tool calling interfaces (TCI).
When exchanging modules, parameters are automatically downloaded into the control unit via PROFIsafe-compatible iPar server – depending on settings. The PROFIsafe address can be set using the DIP switch located on the side of the module, or via WAGO-I/O-*CHECK*.
The module supports PROFIsafe protocols V2.4 (PROFIBUS, PROFINET) and V2.6 (PROFINET).
Field and system levels are electrically isolated.
Individual safety modules can be arranged in any combination when configuring the fieldbus node.
To protect the 24 VDC power supply against surge and burst (to IEC 61000-6-7 and for marine applications), a WAGO filter module or a suitable external interference suppression filter must be used. Additional information can be found in the product manual (available in German and English).
The 75x-662/000-004 Module was evaluated by UL to UL/CSA 61010-1, UL/CSA 61010-2-201, UL 121201, and CSA-C22.2 No. 213.
The functional safety assessment to the specified standards was conducted by TÜV Rheinland.
Additional information and examples can be found in the WAGO Download Center (link: Learning Material | WAGO Download Center).

General technical data	
Protocols	PROFIsafe V2.6 (PROFINET) and V2.4 (PROFIBUS, PROFINET)
Configuration options	PROFIsafe address adjustable via DIP switch or engineering software
Indicators	LED (A-D) green/red: Status/Error I1 ... I8; LED (E) red: Group error; LED (F-H) green/red: Diagnostics
Total number of channels (module)	8
Pluggable connector	fixed

Digital Inputs	
Number of digital inputs	8
Signal type	Digital
Signal type (voltage)	24 VDC
Sensor connection	8 x (Fail-safe input with test pulse)
Input characteristic	clock sensitive
Input characteristic	Type 1 per IEC 61131
Input current per channel for signal (1) typ.	3 mA
Signal frequency (max.)	50 Hz

Digital Clock Outputs	
Signal type	Digital
Signal type (voltage)	24 VDC
Output current per channel	0.1 A

Digital outputs	
Signal type	Digital
Signal type (voltage)	24 VDC

Technical data	
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	120 mA
Supply voltage (field)	24 VDC, SELV/PELV (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Current consumption, field supply (module with no external load)	35 mA
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A

Functional Safety	
Achievable safety classes	SIL 3; Category 4, PLe (two-channel); SIL 2; Category 2; PLd (one-channel)
Safety standards	IEC 61508-1 ... -7; EN ISO 13849-1; EN 62061
Interface types according to ZVEI (inputs)	Drain; A, C0, C1, C2, C3

Continued on next page

Connection Data

Connection technology: I/O	16 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
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	24 mm / 0.945 inches
Height	100 mm / 3.937 inches
Depth	67.8 mm / 2.669 inches
Depth from upper-edge of DIN-rail	60.6 mm / 2.386 inches

Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	fixed

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	1.621 MJ
Weight	96.5 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, 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, EN 61000-6-7 (FS)
EMC emission of interference	per EN 61000-6-3, -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

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966334081
Customs tariff number	85389099990

Continued on next page

Product Classification

UNSPSC	32151705
ETIM 9.0	EC001599
ETIM 10.0	EC001599
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 693-98-1 7439-92-1 80-05-7
REACH Candidate List Substance	2-methylimidazole 4,4'-isopropylidenediphenol 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)	bffe983b-203b-4112-84e6-89e6790923df
SCIP notification number (Belgium)	fdf24570-a7d3-4cfe-909a-6340d695de4e
SCIP notification number (Bulgaria)	89eb339d-4807-4740-a943-6999d5b1e756
SCIP notification number (Czech Republic)	3e8c52cc-5320-4926-b0f5-a5c03799aa8e
SCIP notification number (Denmark)	da2def3e-6cf0-4229-9ec7-4e2ae2d0c9fd
SCIP notification number (Finland)	1bf63bc6-2177-4275-8258-3fe7591fc421
SCIP notification number (France)	98cdfc68-e272-46e0-bcc1-b64e15222c92
SCIP notification number (Germany)	d34568be-ca53-43a8-86e5-30be56a7996b
SCIP notification number (Hungary)	a835e7ac-30d8-4889-9d51-5234343a99f1
SCIP notification number (Italy)	8589371e-4c86-48b8-be1e-0276fd86a30b
SCIP notification number (Netherlands)	b7519976-8bca-4637-89f1-c624a9df6bc2
SCIP notification number (Poland)	7d23aca3-e1a6-4509-9585-0eb1edb3383e
SCIP notification number (Romania)	92f18abe-83da-473a-894c-6aa43f726690
SCIP notification number (Sweden)	e5c053d8-6388-49a0-ba09-a08cd3057cbe

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Declarations of conformity and manufacturer's declarations

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

Continued on next page

Approvals for marine applications

Approval	Standard	Certificate Name
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
PRS Polski Rejestr Statków	-	TE/1101/880590/23

Approvals for hazardous areas

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	-	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
IECEx TUEV Nord Cert GmbH	-	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV 12.1297 X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Approvals for functional safety

Approval	Standard	Certificate Name
Prod. Safety, Funct. Safety TUEV Rheinland Industrie Service GmbH	-	No. 968/EZ 247.24/25
Profi-Safe Siemens AG/ComDeC	-	Z20293

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-662/000-004

Documentation

Manual

Product Manual 8FDI 24V PROFIsafe	V 1.1.0 13.02.2023	pdf 4842.49 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	
Functional Safety – General Product Information	pdf 217.82 KB	

Continued on next page

Bid Text

0750-0662/0000-0004	docx 33.99 KB	
0750-0662/0000-0004	xml 9.97 KB	

Instruction Leaflet

Operating and assembly instructions	V 1.3.0 12.04.2023	pdf 792.49 KB	

Application Notes

Application note SIEMENS

Using iPar-Server option with WAGO PROFIsafe modules (a114802)	V 14.1 07.02.2023	zip 130043.55 KB	

CAD/CAE-Data

CAD data

2D/3D Models
750-662/000-004

CAE data

EPLAN Data Portal
750-662/000-004

Engineering-Software

Configuration and Commissioning Software

Safety Editor (SEDI) / 750-66x	3.5.1.0 25.01.2024	zip 19060.65 KB	

Runtime Software

Firmware

0750-0662/0000-0004, Sicherer Digitaleingang	V 02 20.01.2023	zip 1021.28 KB	

System Software

F-Address Confirmation Tool

 Continued on next page

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 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.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-114
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.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.1.2 Marking

1.1.2.1 Group marker carrier



Item No.: 750-107
Group marker carrier

1.1.2.2 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



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

Continued on next page

1.1.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.1.3 Shield termination

1.1.3.1 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

1.1.4 Supply module

1.1.4.1 Supply module



Item No.: 750-612
Power Supply; 0 … 230 V AC/DC



Item No.: 750-602
Power Supply; 24 VDC



Item No.: 750-601
Power Supply; 24 VDC; fuse holder



Item No.: 750-610
Power Supply; 24 VDC; fuse holder; Diagnostics

1.1.5 System enclosure

1.1.5.1 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