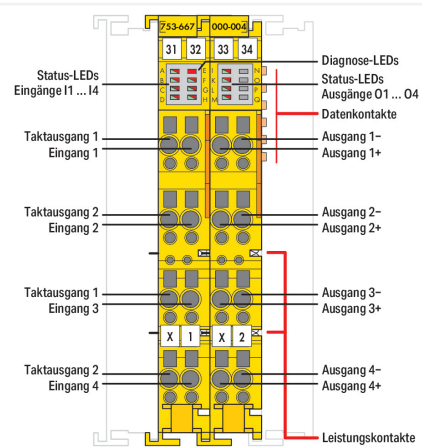
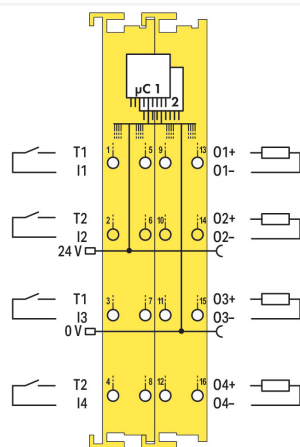
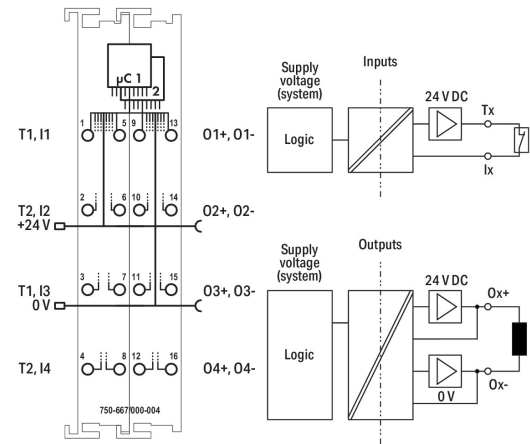
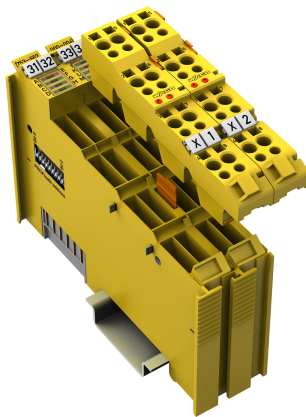


Data Sheet | Item Number: 753-667/000-004

Fail-safe 4/4 channel digital input/output; 24 VDC; 2 A; PROFIsafe

<https://www.wago.com/753-667/000-004>



The 75x-667/000-004 Module is equipped with four power outputs (O1 ... O4) and four clock sensitive inputs (I1 ... I4). The sensors can be supplied directly with 24 V, or fed by two differently clocked outputs (T1 ... T2). The inputs connect potential-free, emergency-off switches with contacts, safety interlock switches, mode selectors, as well as both safety sensors and semiconductor outputs (e.g., light barriers, PLC outputs). The power outputs switch both DC13 resistive and inductive loads with up to a 2A-rated current without requiring any additional external circuit.

The power outputs operate in both bipolar (high-side/low-side switching) and unipolar (common potential on one side of the load) modes.

The module monitors short circuits, cross circuits and 24 V power supply from separate sources. Monitoring and other safety-relevant parameters – such as operating modes, disabling of test pulses, discrepancy times, 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.

If, for example, the cable length of the 24 V supply is greater than 3 m, a WAGO Filter Module or an appropriate external filter must be used for the 24 V power supply to protect the module against surge and burst (per IEC 61000-6-7 and marine applications).

Additional information can be found in the product manual (available in German and English).

The 75x-667/000-004 module has been evaluated by UL in accordance with UL/CSA 61010-1, UL/CSA 61010-2-201, and UL 121201, CSA-C22.2 No. 213 standards.

The functional safety assessment was carried out by TÜV Rheinland in accordance with the applicable standards.



Notes	
Note	Pluggable connectors and coding fingers (753 Series) are not included.
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 ... I4; LED (I-M) green/red: Status/error O1 ... O4; LED (E) red: Group error; LED (F-H) green/red: Diagnostics
Total number of channels (module)	8
Pluggable connector	pluggable
Digital Inputs	
Number of digital inputs	4
Signal type	Digital
Signal type (voltage)	24 VDC
Sensor connection	4 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	2 A
Digital Outputs	
Number of digital outputs	4
Signal type	Digital
Signal type (voltage)	24 VDC
Output current	short-circuit-protected
Output current (module)	8 A
Actuator connection	4 x (fail-safe output with test pulse)
Output circuit design	Power outputs
Switching frequency (max.)	50 Hz; Resistive load
Switching frequency (max.) (2)	0.1 Hz; Inductive load
Switching frequency (max.) (3)	0.1 Hz; Capacitive load
Capacitive load for each channel	O1 ... O4; 47 µF
Technical data	
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	120 mA
Supply voltage (field)	24 VDC, SELV/PELV (-25 ... +20 %); 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
Interface types per ZVEI CB24I (outputs)	Source; C0, C1, C2, C3, D0, D1, D2, D3
Test pulse duration (max.)	500 ms
Test pulse duration (min.)	0 ms

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	9 ... 10 mm / 0.35 ... 0.39 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	pluggable

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	1.578 MJ
Weight	86.4 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 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	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966334296
Customs tariff number	85371098990

Product Classification	
UNSPSC	39121521
ETIM 9.0	EC001599
ETIM 8.0	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)	bc0e69c0-da65-4671-9a8e-c58489007062
SCIP notification number (Belgium)	9468acd0-f5a0-4ed9-885b-0600a1ac7746
SCIP notification number (Bulgaria)	f299caf2-376f-4411-bb46-08ecdd79bfa0
SCIP notification number (Czech Republic)	f3b5dd15-45e7-4514-ad18-14b8ba5cf819
SCIP notification number (Denmark)	fc77d931-8774-49ec-9fd0-7ac227e7e4f5
SCIP notification number (Finland)	61d7bcb5-d68f-4440-b203-a8c18dd6ea4f
SCIP notification number (France)	d8548da1-7f4d-4332-a0c4-7c2f17ed3710
SCIP notification number (Germany)	ca724cdc-4788-481e-b0cb-43881bfd5a30
SCIP notification number (Hungary)	8901cb92-51dc-4187-9afc-116014e1e3d4
SCIP notification number (Italy)	025125b1-f391-4aed-b335-b8ad273c495d
SCIP notification number (Netherlands)	7e446079-49d6-4b75-9b44-a7b95add0a40
SCIP notification number (Poland)	a5a06d91-a390-4b65-9cf2-69b577690ab4
SCIP notification number (Romania)	7f2ca3b6-7f8d-4ea8-9ac1-04bcfd19e659
SCIP notification number (Sweden)	bd3a1221-8af7-4a42-bf7b-f87575387f9e

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199
		EU-Declaration of Conformity WAGO GmbH & Co. KG
		UK-Declaration of Conformity WAGO GmbH & Co. KG



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)
CCCEX CQST/CNEx	-	2020312310000213 (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 247.18/21
Profi-Safe Siemens AG/ComDeC	-	Z20294

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 753-667/000-004



Documentation

Manual
Product Manual 4FDI/4FDO 24V/2A PROFIsafe

V 1.1.0
13.02.2023

pdf
4777.98 KB



System Description
750/753 Series I/O-System – General Product Information
Overview on WAGO-I/O-SYSTEM 750 approvals
Functional Safety – General Product Information

pdf
953.35 KB



pdf
770.48 KB



pdf
217.82 KB





Bid Text		
0753-0667/0000-0004	docx 35.69 KB	↓
0753-0667/0000-0004	xml 11.55 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 753-667/000-004	↓

Engineering-Software

Configuration and Commissioning Software			
F-Address Confirmation Tool	1.2.2 06.06.2023	zip 3757.47 KB	↓
Safety Editor (SEDI) / 750-66x	3.5.1.0 25.01.2024	zip 19060.65 KB	↓

1 Compatible Products

1.1 Required Accessories

1.1.1 Pluggable connector

1.1.1.1 Male connector/plug



Item No.: [753-120](#)
Plug; Safety



1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 Mounting accessories



Item No.: 210-196
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



Item No.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



Item No.: 210-508
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; 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; slopped; similar to EN 60715; silver-colored



Item No.: 210-506
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; 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; unslopped; similar to EN 60715; silver-colored



Item No.: 210-118
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



Item No.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; 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; slopped; 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; slopped; 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; unslopped; according to EN 60715; silver-colored



Item No.: 210-505
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; galvanized; according to EN 60715; silver-colored

1.2.2 Marking

1.2.2.1 Group marker carrier



Item No.: 750-107
Group marker carrier

1.2.2.2 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



1.2.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.2.3 Pluggable connector

1.2.3.1 Coding



Item No.: 753-150
753 Series coding elements

1.2.4 Shield termination

1.2.4.1 Shield clamping saddles



Item No.: 790-108
Shield clamping saddle; 11 mm wide; dia-
meter 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; dia-
meter 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; dia-
meter 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 com-
patible conductor

1.2.5 Supply module

1.2.5.1 Supply module



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



Item No.: 753-612
Power Supply; 0 ... 230 V AC/DC



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



Item No.: 753-602
Power Supply; 24 VDC



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



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

1.2.6 System enclosure

1.2.6.1 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); Wx-
HxD (164x100x164 mm); 9 x M12, 4 x M20



1.2.6.1 System enclosure



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