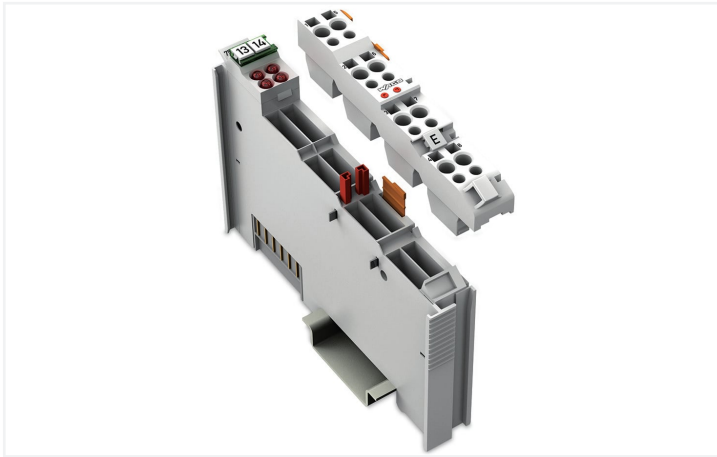
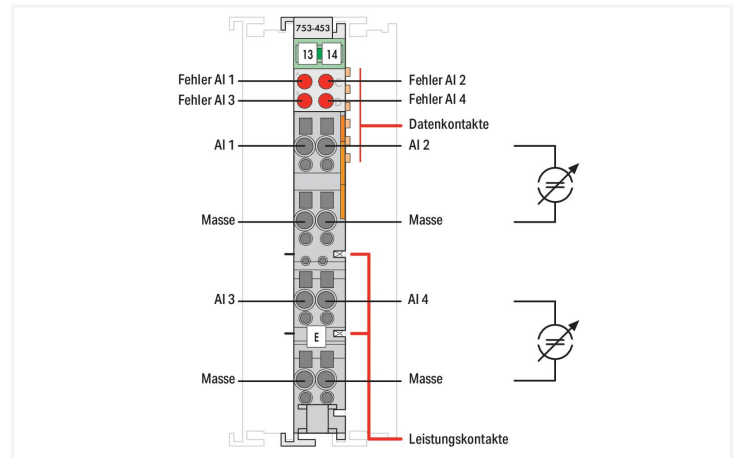
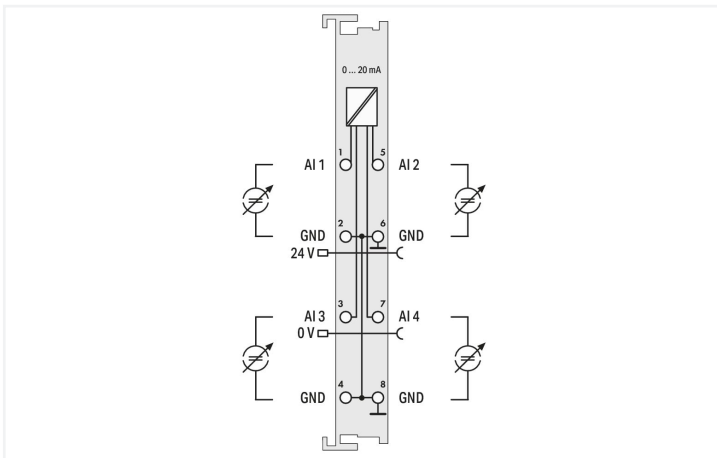
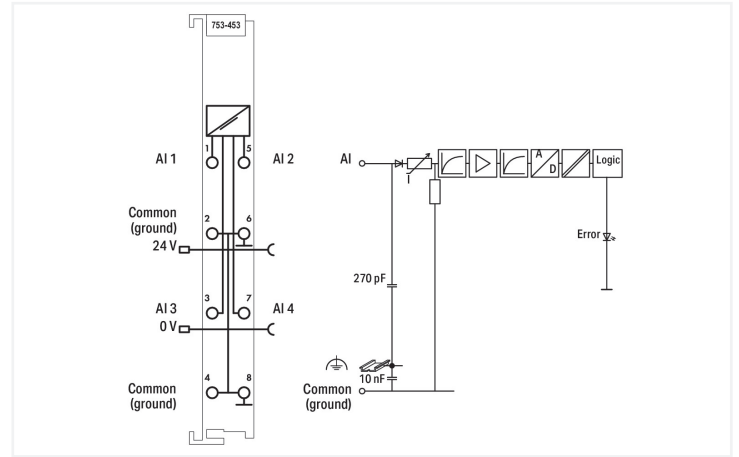


**Data Sheet | Item Number: 753-453**  
**4-channel analog input; 0 ... 20 mA; Single-ended**

<https://www.wago.com/753-453>



Color: ■ light gray



This analog input module processes standard 0–20 mA signals.  
 The input signal is electrically isolated and is transmitted with a resolution of 12 bits.  
 The internal system supply powers the module.  
 The input channels of the module have a common ground potential.

**Notes**

Note Pluggable connectors and coding fingers (753 Series) are not included.

**Technical data**

Number of analog inputs	4
Total number of channels (module)	4
Signal type	Current
Signal type (current)	0 ... 20 mADC
Sensor connection	4 x (2-wire)
Input voltage (max.)	32 V
Signal characteristics	Single-ended
Resolution [bit]	12 bits
Input resistance (max.)	100 Ω
Data width	4 x 16-bit data; 4 x 8-bit control/status (optional)
Conversion time (typ.)	10 ms
Measurement error (reference temperature)	25 °C
Measurement error, deviation (max.) from the upper-range value	0.1 %
Temperature error (max.) of the upper-range value	0.01 %/K
Supply voltage (system)	5 VDC; via data contacts

### Technical data

Current consumption (5 V system supply)	65 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Isolation	500 V system/field
Indicators	LED (A-D) red: Error AI 1 ... AI 4
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

### Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

### Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

### Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	pluggable

### Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.157 MJ
Weight	43.2 g
Conformity marking	CE

### Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +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 <sub>2</sub> S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %	25 ppm

### Commercial data

Product Group	15 (I/O System)
eCl@ss 10.0	27-24-26-01
eCl@ss 9.0	27-24-26-01
ETIM 8.0	EC001596
ETIM 7.0	EC001596
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454481940
Customs tariff number	85389099990

### Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	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)	4a107934-ff58-4e24-8e40-ddf2e663edc3
SCIP notification number (Belgium)	3a9c4828-5165-4e91-9141-3f17847f5978
SCIP notification number (Bulgaria)	6006969c-6156-486c-a0e9-a439115718b7
SCIP notification number (Czech Republic)	bde5cdd7-c6dc-4164-ae7-5e16ebc27d07
SCIP notification number (Denmark)	cafad70c-743f-45f1-9d1c-7ce896362d73
SCIP notification number (Finland)	16b27075-611a-4245-a6be-4b1e42cfc52f
SCIP notification number (France)	22a6d545-1fd7-4416-9f4e-a6860de76327
SCIP notification number (Germany)	5a81def2-7e40-4c56-921b-5a5b2aa29f5d
SCIP notification number (Hungary)	a20f90ab-1a7b-43bf-a21f-f464988c0d20
SCIP notification number (Italy)	e35509e2-8889-48d8-a58d-2ad85241aea0
SCIP notification number (Netherlands)	a7f2b1f2-361e-4143-a943-adf8850b245a
SCIP notification number (Poland)	8494d8f9-bc08-4c66-8120-fe3af72013d7
SCIP notification number (Romania)	270bbd73-f4b0-49e8-8be5-0cf33579d1d1
SCIP notification number (Sweden)	fee20179-c066-4a7e-b273-932de02798c2

### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	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-AIM750

#### 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
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



Approval	Standard	Certificate Name
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)
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 TUV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TUV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 753-453



Documentation

Manual

System Manual WAGO I/O System 750/753	V 3.3.3 29.08.2023	pdf 8512.61 KB	
System Manual Series 750/753			
Product Manual 4-channel, 0-20mA, single-ended	V 2.0.0 14.07.2023	pdf 2899.08 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

753-453	19.02.2019	xml 4.47 KB	
753-453	17.10.2017	doc 28.50 KB	

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	
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CAD/CAE-Data

**CAD data**  
2D/3D Models 753-453

**CAE data**  
EPLAN Data Portal 753-453   
WSCAD Universe 753-453   
ZUKEN Portal 753-453

1 Compatible Products

1.1 Required Accessories

1.1.1 Pluggable connector

1.1.1.1 Male connector/plug



[Item No.: 753-110](#)  
Plug

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; 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

1.2.2 Marking

1.2.2.1 Group marker carrier



[Item No.: 750-106](#)  
Group marker carrier

1.2.2.2 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

1.2.2.3 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; 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

## 1.2.5 System enclosure

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

**Item No.: 850-835**

IP65 enclosure; Polyester (RAL 7032); Wx-  
HxD (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 flan-  
ge plate

**Item No.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035);  
WxHxD (300x120x200 mm); without flan-  
ge plate

**Item No.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035);  
WxHxD (400x120x200 mm); without flan-  
ge plate

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

IP65 enclosure; Sheet steel (RAL 7035);  
WxHxD (600x120x200 mm); without flan-  
ge plate