

Data sheet | Item number: 750-463

4-channel analog input; For Pt1000/RTD resistance sensors; Adjustable

[www.wago.com/750-463](http://www.wago.com/750-463)



Color:

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

WAGO GmbH & Co. KG

Hansastra. 27

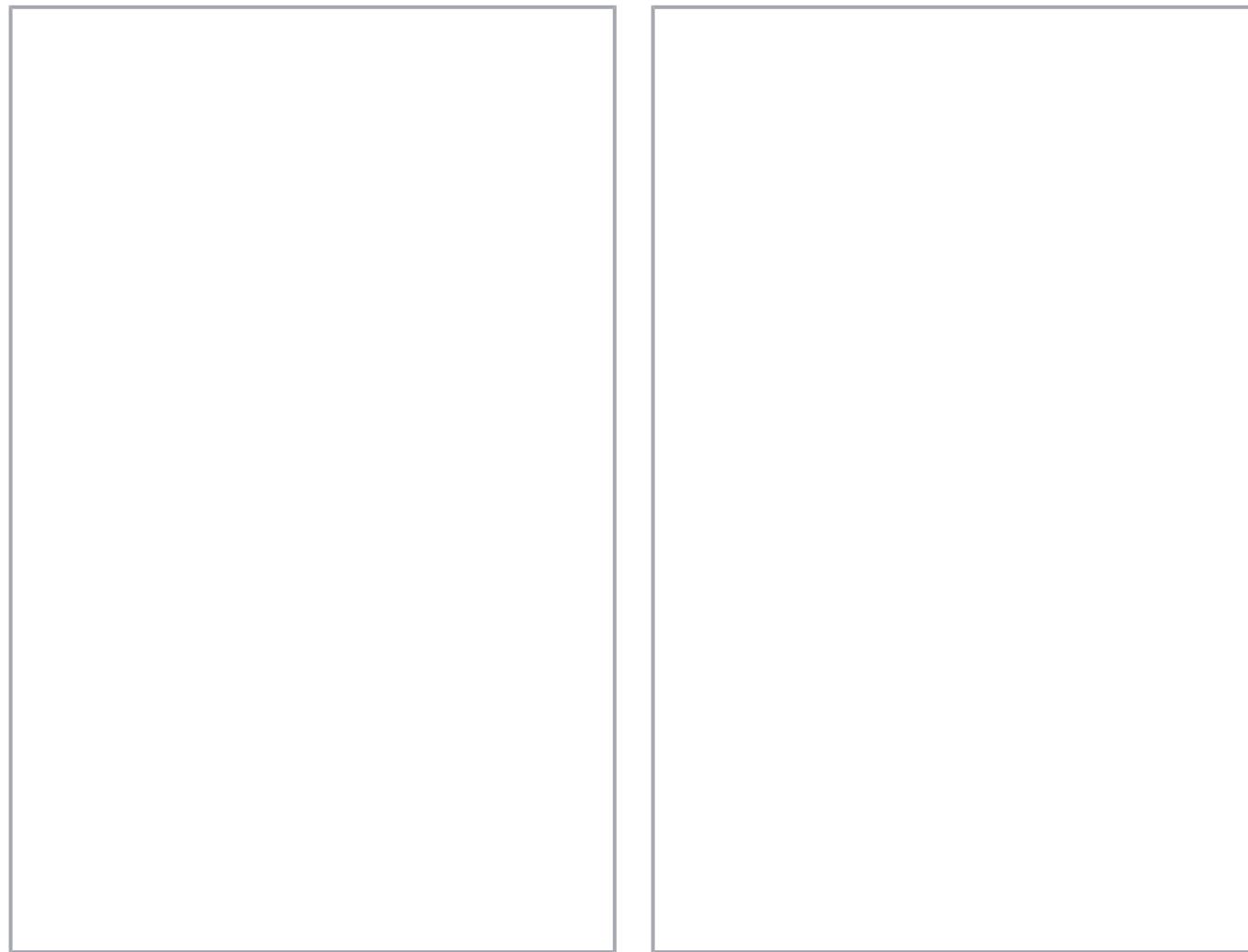
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Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



## Item description

This analog input module directly connects to select Pt or Ni resistance sensors.

It can only be operated as a 4-channel (2-wire) module. Its temperature range is restricted to -30 ... +150 °C.

The module automatically linearizes the entire temperature range. A sensor error (short circuit, line break or measurement range overflow) is indicated by a red LED. The module can be configured via WAGO-I/O-CHECK or GSD files.

It features multiple setting options and high accuracy.

## Data

### Technical data

Number of analog inputs

4

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

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Total number of channels (module)	4
Signal type	Resistance measurement
Signal type (configurable)	yes
Sensor connection	4 x (2-wire)
Data width	4 x 16-bit data; 4 x 8-bit control/status (optional)
Resolution (over entire range)	0.1 °C
Measurement error (25 °C)	≤ 0.5 K in temperature range: -30 ... +150 °C
Temperature coefficient	≤ 20 ppm/K
Measuring current (typ.)	≤ 350 µA
Measurement repetition rate (standard)	1.1 s
Measurement repetition rate (2-channel/2-conductor)	0.63 s
Response time (max.)	4 s
Sensor types	Pt1000; Configurable: Ni1000, KTY 81
Temperature range	-30 ... +150 °C
Configuration options	WAGO-I/O-CHECK CODESYS Library e!COCKPIT
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	50 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, B, E, F) green: Function AI 1 ... AI 4; LED (C, D, G, H) 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 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	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	67.8 mm / 2.669 inches

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

Depth from upper-edge of DIN-rail

60.6 mm / 2.386 inches

**Mechanical Data**

Mounting type	DIN-35 rail
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**Material Data**

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.967 MJ
Weight	49.7 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	per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-1; EN 61000-6-2
EMC emission of interference	per EN 61000-6-3
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

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

PU (SPU)	1 pcs
Packaging type	box
Country of origin	DE
GTIN	4050821419181
Customs tariff number	85389099990

## Environmental Product Compliance

CAS-No.	11120-22-2 1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide Lead silicate
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	5bf9acfa-cae9-40f8-9227-dbac3fa5b5ff
SCIP notification number (Belgium)	c5adc442-cade-45f2-9dda-5291786a185c
SCIP notification number (Bulgaria)	351aa088-aa27-4073-acc7-d36e4d1c3e46
SCIP notification number (Czech Republic)	51b6f167-f86d-4477-88a0-18224864da59
SCIP notification number (Denmark)	4e024681-b63d-4671-83ae-8f999d38b5e6
SCIP notification number (Finland)	20ad00eb-d6c4-4606-91c6-3f058f102782
SCIP notification number (France)	e53e2dc8-6e08-4243-a10b-f88a1261042b
SCIP notification number (Germany)	6912aeb9-9bc1-43f9-a3dc-03d6a7ddaf65
SCIP notification number (Hungary)	96a749ad-ddee-41b1-a067-4a5159a4fc当地
SCIP notification number (Italy)	495218c6-9554-4fbe-a4e2-7ed7ff8c6afe
SCIP notification number (Netherlands)	42f490c3-0a52-4504-9233-6c8cffbca53d
SCIP notification number (Poland)	3bbdb231-cedc-4378-afc0-0b7a68417905
SCIP notification number (Romania)	d71ce009-40a0-45c9-80ac-897713a322a6
SCIP notification number (Sweden)	e24e768b-0900-471e-a213-b9b1d9b5a430

## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC	TP TC 020/2011	EAC RU C-

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

Brjansker Zertifizierungsstelle

DE.AM02.  
B.00087  
/19

KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- AIM750
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
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-
	<b>UK-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

**Approvals for hazardous areas**

Logo	Approval	Additional Approval Text	Certificate name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
	<b>CCCEEx</b> CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
	<b>EAC</b> Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02.B.00163 /19 (2Ex nA IIC T4 Gc X)
	<b>IECEx</b> TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
	<b>INMETRO</b> TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X
	<b>UKEx</b> WAGO GmbH & Co. KG	EN 60079-0	UKCA_WAGO22UKEX003X_ec

**Optional accessories****Shield termination**

Shield clamping saddles

<b>Item no.: 790-116</b>	Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	<a href="http://www.wago.com/790-116">www.wago.com/790-116</a>
<b>Item no.: 790-124</b>	Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	<a href="http://www.wago.com/790-124">www.wago.com/790-124</a>
<b>Item no.: 790-108</b>	Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm	<a href="http://www.wago.com/790-108">www.wago.com/790-108</a>

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

**Item no.: 790-140** [www.wago.com/790-140](http://www.wago.com/790-140)  
 Shield clamping saddle; diameter of compatible conductor

**Item no.: 790-216** [www.wago.com/790-216](http://www.wago.com/790-216)  
 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

**Item no.: 790-220** [www.wago.com/790-220](http://www.wago.com/790-220)  
 Shield clamping saddle; 30 mm wide; 6 ... 20 mm

**Item no.: 790-208** [www.wago.com/790-208](http://www.wago.com/790-208)  
 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

#### Carrier rail

##### Mounting accessories

**Item no.: 210-197** [www.wago.com/210-197](http://www.wago.com/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.: 210-198** [www.wago.com/210-198](http://www.wago.com/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.: 210-504** [www.wago.com/210-504](http://www.wago.com/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.: 210-505** [www.wago.com/210-505](http://www.wago.com/210-505)  
 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

**Item no.: 210-506** [www.wago.com/210-506](http://www.wago.com/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.: 210-508** [www.wago.com/210-508](http://www.wago.com/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.: 210-113** [www.wago.com/210-113](http://www.wago.com/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.: 210-118** [www.wago.com/210-118](http://www.wago.com/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.: 210-112** [www.wago.com/210-112](http://www.wago.com/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.: 210-114** [www.wago.com/210-114](http://www.wago.com/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.: 210-115** [www.wago.com/210-115](http://www.wago.com/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.: 210-196** [www.wago.com/210-196](http://www.wago.com/210-196)  
 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored

#### Marking accessories

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

## Marker carrier

**Item no.: 750-103**  
Group marker carrier

[www.wago.com/750-103](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://www.wago.com/2009-145/000-024)

**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](http://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](http://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](http://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](http://www.wago.com/248-501/000-012)

**Item no.: 248-501**

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

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

[www.wago.com/248-501](http://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](http://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](http://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](http://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](http://www.wago.com/248-501/000-023)

## Group marker carrier

**Item no.: 750-107**

Group marker carrier

[www.wago.com/750-107](http://www.wago.com/750-107)

## 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](http://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](http://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](http://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](http://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](http://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](http://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](http://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

[www.wago.com/850-827/002-000](http://www.wago.com/850-827/002-000)

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

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[www.wago.com/850-826/002-000](http://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](http://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](http://www.wago.com/850-828)**Item no.: 850-834**

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

[www.wago.com/850-834](http://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](http://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](http://www.wago.com/850-836)**Downloads****Documentation****Manual**

System Manual WAGO I/O System 750/753 Decentralized Automation Technology	V 3.3.3 2023 年8月29 日	pdf 8.7 MB	<a href="#">Download</a>
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Product Manual 4 AI RTD/-30°C ... +150°C 4-Channel Analog Input Module for Resistance Sensors, Temperature Range: -30°C ... +150°C	V 1.1.0	pdf 3.2 MB	<a href="#">Download</a>
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## Instruction Leaflet

CCC Ex (Additional information) WAGO-I/O-SYSTEM *750-****/*	2023 年4月26 日	pdf 163.6 kB	Download
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## System Description

Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 223.5 kB	Download
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750/753 Series I/O-System – General Product Information	pdf 976.2 kB	Download
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## Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 年8月18 日	pdf 2.2 MB	Download
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## Application Notes

### Application Note CoDeSys 2.3

Application Note Library ModuleAccess_01 These instructions describe the use of the ModuleAccess_01.lib library using 4 examples.	05.01.2016 2016 年1月29 日	zip 1.0 MB	Download
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## Libraries

Library			
ModuleAccess_01.lib The ModuleAccess_01 library provides both module configuration and access to its process data within a CoDeSys project without the use of WAGO I/O Check.	1.8.7 2020 年1月27 日	zip 2.2 MB	Download

## CAD/CAE-Data

### CAD data

2D/3D Models 750-463	URL	Download
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### CAE data

EPLAN Data Portal 750-463	URL	Download
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WSCAD Universe 750-463

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ZUKEN Portal 750-463

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## Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-463

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4-channel analog input; For Pt1000/RTD resistance sensors; Adjustable

## Installation Notes

### Product family

**WAGO I/O System 750/753**

[Show all products from the family](#)

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WAGO GmbH & Co. KG

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