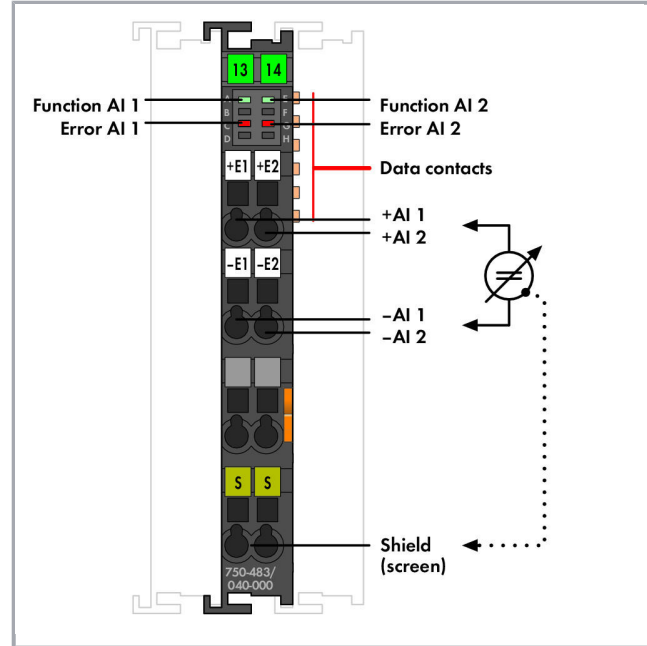


Data sheet | Item number: 750-483/040-000

2-channel analog input; 0 ... 30 VDC; Differential input; Extreme; dark gray

[www.wago.com/750-483/040-000](http://www.wago.com/750-483/040-000)



RoHS  Compliant

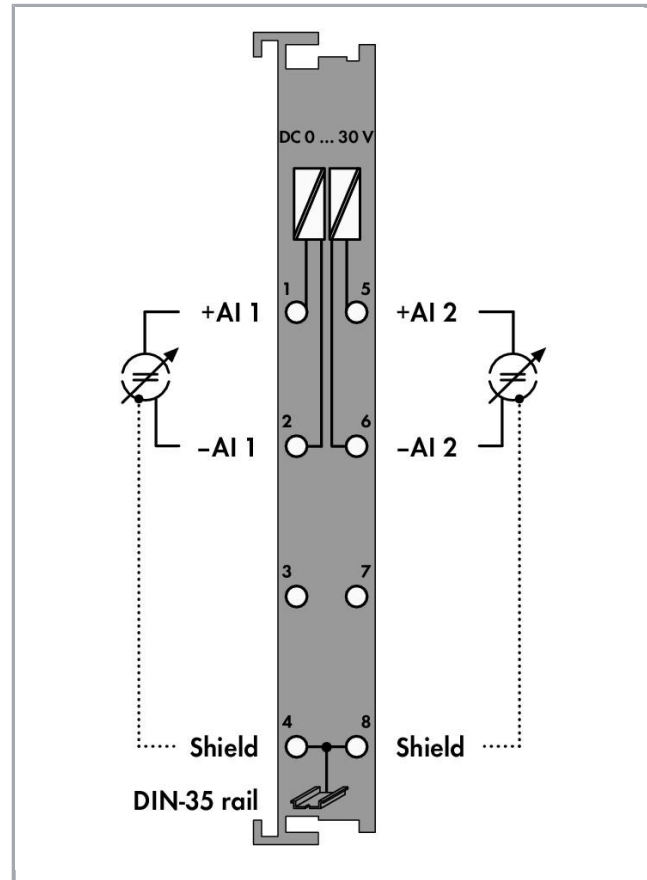
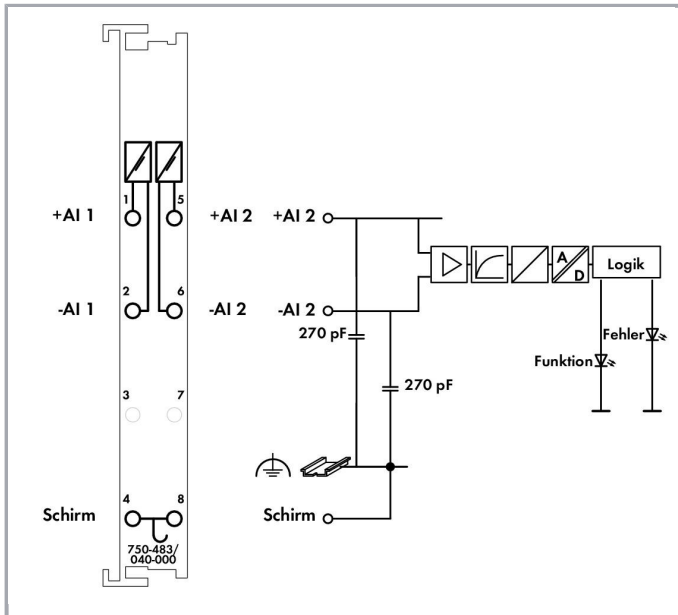
[BOMcheck.net](https://www.bomcheck.net)

Color: ■

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

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## Item description

This analog input module processes differential signals ranging from 0 to 30 VDC.

The input signal of each channel is electrically isolated and is transmitted with a resolution of 14 bits.

The system supply powers the module.

The shield directly connects to the DIN-rail.

- Measured value acquisition: Time synchronous within the module
- Measurement range overflow/underflow: Status byte and LED
- Conversion method: SAR (Successive Approximation Register)
- Operating mode: Continuously sampling (default)
- Protection: RC circuit

The device is ideal for operation in extreme environments thanks to:

- Extended temperature range

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



- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

## Data

### Technical Data

Number of analog inputs	2
Total number of channels (module)	2
Type of signal	Voltage
Type of signal voltage	DC 0 ... 30 V
Sensor connection	2 x (2-wire)
Input filter	Low pass (1st order), $f_G = 5 \text{ kHz}$
Signal characteristic	Differential
Resolution [bit]	14 Bit
Bit width	2 x 16-bit data; 2 x 8-bit control/status (optional)
Admissible continuous overload	60 V
Crosstalk attenuation	80 dB
Monotonicity without missing codes	yes
Internal resistance	1000 k $\Omega$
Messfehler, Bezugstemperatur	25 °C
Messfehler, Abweichung max. vom Messbereichsendwert	0.1 %
Error in complete temperature range	$\leq 0.4 \%$
Temperaturfehler max. vom Messbereichsendwert	0.01 %/K
Sampling duration	5 $\mu\text{s}$
Sampling delay (channel/channel)	1 $\mu\text{s}$
Sampling delay (module)	1 ms
Sampling time of repetition	1 ms
Value of the LSB (least significant bit)	1.8 mV
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	80 mA
Dielectric strength	510 VAC/775 VDC; per EN 60870-2-1
Rated surge voltage	1 kV

### Connection data

Connection technology: In-/Outputs	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0,25 ... 2,5 mm <sup>2</sup> / 24 ... 14 AWG

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



Fine-stranded conductor	0,25 ... 2,5 mm <sup>2</sup> / 24 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

### Geometrical Data

Width	12 mm / 0.472 inch
Height	67,8 mm / 2.669 inch
Height from upper-edge of DIN-35 rail	60,6 mm / 2.386 inch
Depth	100 mm / 3.937 inch

### Mechanical data

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

### Material Data

Color	dark gray
Housing material	Polycarbonate, polyamide 6.6
Weight	47.2 g
Conformity marking	CE

### Environmental Requirements

Surrounding air (operating) temperature	-40 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)
Mounting position	horizontal (standing/lying); vertical
Relative air humidity (no condensation)	95 %
Relative humidity	Short-term condensation per Class 3K7/IEC EN 60721-3-3 and E-DIN 40046-721-3 (except for wind-driven precipitation, water and ice formation)
Vibration resistance	per IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155; EN 61373
Shock resistance	per IEC 60068-2-27 (15g/11 ms/half-sine/1,000 shocks; 25g/6 ms/1,000 shocks), EN 50155, EN 61373
EMC immunity to interference	per EN 61000-6-1, -2; EN 61131-2; marine applications; EN 50121-3-2; EN 50121-4, -5; EN 60255-26; EN 60870-2-1; EN 61850-3; IEC 61000-6-5; IEEE 1613; VDEW: 1994
EMC emission of interference	per EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine

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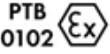


applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, EN 50121-4, -5

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**

Packaging type	BOX
Country of origin	DE
GTIN	4055143673105
Customs Tariff No.	85389099990

**Approvals / Certificates****Ex-Approvals**

Logo	Approval	Additional Approval Text	Certificate name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079-0	TUEV 17 ATEX 193969X
	<b>IECEX</b> TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 16.0046X
	<b>UL</b> Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

**Ship Approvals**

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	18- HG1778162- PDA
	<b>DNV GL</b> Det Norske Veritas, Germanischer Lloyd	-	TAA00000Y7

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	<b>LR</b>	-	17/20073 LR
	Lloyds Register		



	<b>PRS</b>	-	TE/2215 /880590/18
	Polski Rejestr Statków		


#### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>UL</b> Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Sec10











#### Counterpart

#### Compatible products



##### system box

	<b>Item no.: 850-804</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip	<a href="http://www.wago.com/850-804">www.wago.com/850-804</a>
	<b>Item no.: 850-804/000-001</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip	<a href="http://www.wago.com/850-804/000-001">www.wago.com/850-804/000-001</a>
	<b>Item no.: 850-805</b> IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip	<a href="http://www.wago.com/850-805">www.wago.com/850-805</a>
	<b>Item no.: 850-814/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate	<a href="http://www.wago.com/850-814/002-000">www.wago.com/850-814/002-000</a>





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

	<b>Item no.: 850-815/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate	<a href="http://www.wago.com/850-815/002-000">www.wago.com/850-815/002-000</a>
	<b>Item no.: 850-816/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate	<a href="http://www.wago.com/850-816/002-000">www.wago.com/850-816/002-000</a>
	<b>Item no.: 850-817/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate	<a href="http://www.wago.com/850-817/002-000">www.wago.com/850-817/002-000</a>
	<b>Item no.: 850-825</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20	<a href="http://www.wago.com/850-825">www.wago.com/850-825</a>
	<b>Item no.: 850-826</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	<a href="http://www.wago.com/850-826">www.wago.com/850-826</a>
	<b>Item no.: 850-826/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	<a href="http://www.wago.com/850-826/002-000">www.wago.com/850-826/002-000</a>
	<b>Item no.: 850-827</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	<a href="http://www.wago.com/850-827">www.wago.com/850-827</a>
	<b>Item no.: 850-827/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	<a href="http://www.wago.com/850-827/002-000">www.wago.com/850-827/002-000</a>
	<b>Item no.: 850-828</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	<a href="http://www.wago.com/850-828">www.wago.com/850-828</a>
	<b>Item no.: 850-828/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	<a href="http://www.wago.com/850-828/002-000">www.wago.com/850-828/002-000</a>
	<b>Item no.: 850-834</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	<a href="http://www.wago.com/850-834">www.wago.com/850-834</a>
	<b>Item no.: 850-835</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	<a href="http://www.wago.com/850-835">www.wago.com/850-835</a>
	<b>Item no.: 850-836</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	<a href="http://www.wago.com/850-836">www.wago.com/850-836</a>
<b>Carrier rail</b>		
	<b>Item no.: 210-112</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm	<a href="http://www.wago.com/210-112">www.wago.com/210-112</a>
	<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	<a href="http://www.wago.com/210-113">www.wago.com/210-113</a>

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








	<b>Item no.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	<a href="http://www.wago.com/210-114">www.wago.com/210-114</a>
	<b>Item no.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm	<a href="http://www.wago.com/210-115">www.wago.com/210-115</a>
	<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	<a href="http://www.wago.com/210-118">www.wago.com/210-118</a>
	<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-196">www.wago.com/210-196</a>
	<b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	<a href="http://www.wago.com/210-197">www.wago.com/210-197</a>
	<b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	<a href="http://www.wago.com/210-198">www.wago.com/210-198</a>
	<b>Item no.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	<a href="http://www.wago.com/210-504">www.wago.com/210-504</a>
	<b>Item no.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	<a href="http://www.wago.com/210-505">www.wago.com/210-505</a>
	<b>Item no.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	<a href="http://www.wago.com/210-506">www.wago.com/210-506</a>
	<b>Item no.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	<a href="http://www.wago.com/210-508">www.wago.com/210-508</a>

**Marking accessories**

	<b>Item no.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
	<b>Item no.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-002	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
	<b>Item no.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red /000-005	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
	<b>Item no.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue /000-006	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
	<b>Item no.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-007	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>
	<b>Item no.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	<a href="http://www.wago.com/2009-145">www.wago.com/2009-145</a>

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	<p><b>Item no.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>	<a href="http://www.wago.com/2009-145/000-023">www.wago.com/2009-145/000-023</a>
	<p><b>Item no.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p>	<a href="http://www.wago.com/2009-145/000-024">www.wago.com/2009-145/000-024</a>
	<p><b>Item no.: 248-501</b> Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card</p>	<a href="http://www.wago.com/248-501">www.wago.com/248-501</a>
	<p><b>Item no.: 248-501/000-002</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p>	<a href="http://www.wago.com/248-501/000-002">www.wago.com/248-501/000-002</a>
	<p><b>Item no.: 248-501/000-005</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p>	<a href="http://www.wago.com/248-501/000-005">www.wago.com/248-501/000-005</a>
	<p><b>Item no.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>	<a href="http://www.wago.com/248-501/000-006">www.wago.com/248-501/000-006</a>
	<p><b>Item no.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>	<a href="http://www.wago.com/248-501/000-007">www.wago.com/248-501/000-007</a>
	<p><b>Item no.: 248-501/000-012</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p>	<a href="http://www.wago.com/248-501/000-012">www.wago.com/248-501/000-012</a>
	<p><b>Item no.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>	<a href="http://www.wago.com/248-501/000-017">www.wago.com/248-501/000-017</a>
	<p><b>Item no.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>	<a href="http://www.wago.com/248-501/000-023">www.wago.com/248-501/000-023</a>
	<p><b>Item no.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p>	<a href="http://www.wago.com/248-501/000-024">www.wago.com/248-501/000-024</a>
	<p><b>Item no.: 750-103</b> Group marker carrier; transparent</p>	<a href="http://www.wago.com/750-103">www.wago.com/750-103</a>
	<p><b>Item no.: 750-107</b> Group marker carrier; transparent</p>	<a href="http://www.wago.com/750-107">www.wago.com/750-107</a>

**shield connection**

	<p><b>Item no.: 790-108</b> Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm</p>	<a href="http://www.wago.com/790-108">www.wago.com/790-108</a>
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	<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.: 790-140</b> Shield clamping saddle; diameter of compatible conductor	<a href="http://www.wago.com/790-140">www.wago.com/790-140</a>
	<b>Item no.: 790-208</b> Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	<a href="http://www.wago.com/790-208">www.wago.com/790-208</a>
	<b>Item no.: 790-216</b> Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	<a href="http://www.wago.com/790-216">www.wago.com/790-216</a>
	<b>Item no.: 790-220</b> Shield clamping saddle; 30 mm wide; 6 ... 20 mm	<a href="http://www.wago.com/790-220">www.wago.com/790-220</a>

## Downloads

### Documentation

#### Manual

2-channel, 0-30VDC /XTR Differential measuring input	V 1.1.0 Sep 17, 2019	pdf 2.7 MB	Download
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#### Additional Information

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

750 XTR Series I/O-System – General Product Information		pdf 1.1 MB	Download
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
System Manual /XTR Basic conditions and recommendations for higher operational safety	V 1.2.0	pdf 2.9 MB	Download

## CAD/CAE-Data

### CAD data

2D/3D Models 750-483/040-000		URL	Download
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## CAE data

EPLAN Data Portal 750-483/040-000

URL

Download

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## Installation Notes

### Product family

#### 750 XTR Series – I/O System

I/O-System 750 XTR: Dort automatisieren, wo jedes andere System an seine Grenzen stößt – und das zuverlässig und wirtschaftlich! XTR – dieses Kürzel im Systemnamen steht für extremen Schutz vor klimatischen Einflüssen, Schwingungen, Erschütterungen und Überspannungen.

[Learn more about the product family.](#)

[Show all products from the family](#)

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

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