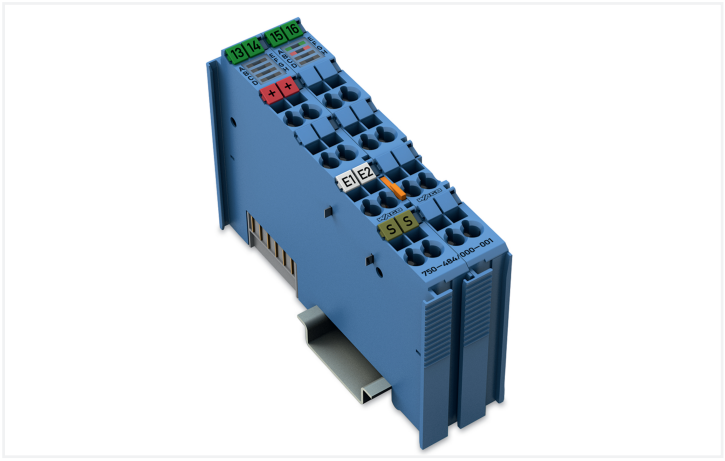
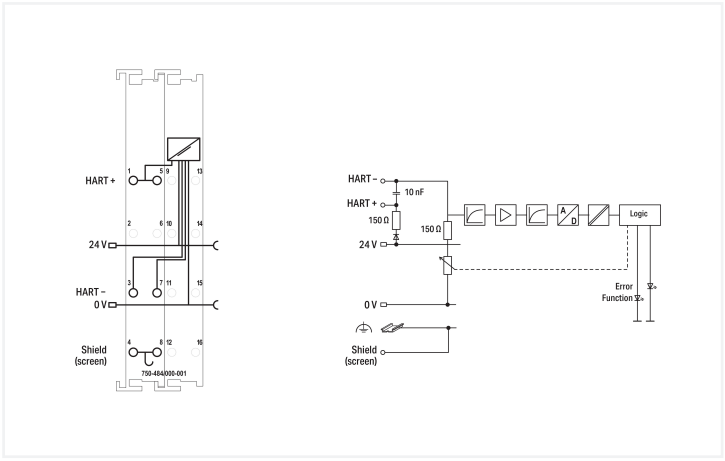
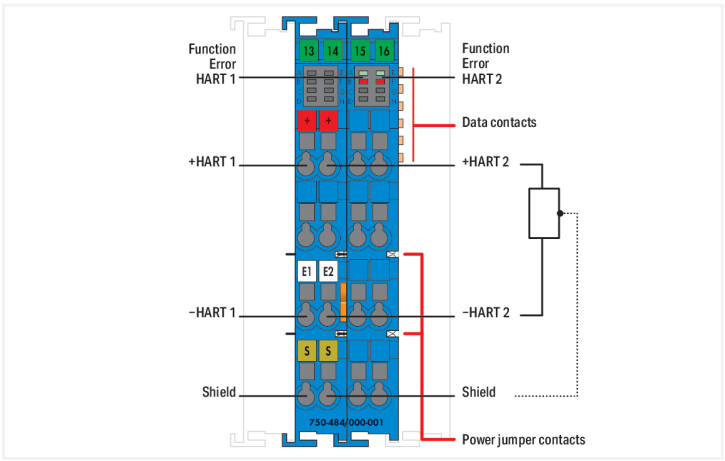
Data Sheet | Item Number: 750-484/000-001

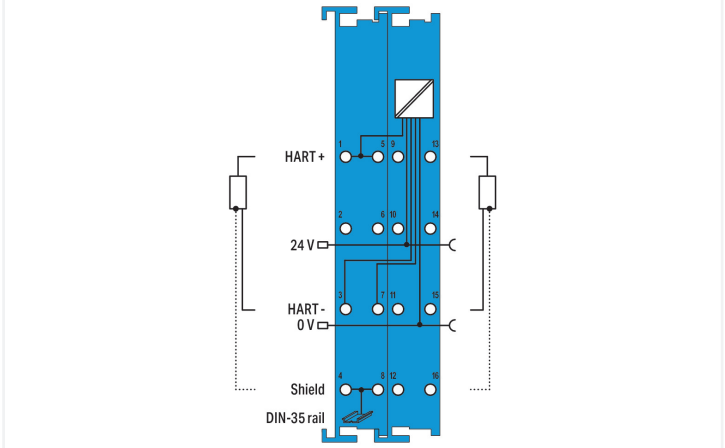
2-channel analog input; 4 … 20 mA HART; NAMUR NE 43; Intrinsically safe

https://www.wago.com/750-484/000-001









This analog input module connects two field-side signal conditioners equipped with a HART interface that are to be used in hazardous areas of Zone 0+1.
The module supplies signal conditioners, reads process values via analog interface, and enables HART communication for configuring and importing dynamic variables.
The WAGO I/O System 750 must be installed either in Zone 2 or in a non-hazardous area.
The measurement input is equipped with current limitation, which limits the current to 25 mA. This module powers 2-wire signal conditioners without dedicated power supply.
Up to 4 HART dynamic variables (PV, SV, TV, QV) per channel can be mapped in the cyclic process image of the coupler or controller (parameterizable). For HART communication with connected intelligent HART field devices, the HART protocol can be mapped in the cyclic process image of the coupler or controller (parameterizable).
FDT/DTM device drivers are available for select (programmable) couplers, allowing HART tool routing to the connected HART device.

Notes

Note	The analog output module must only be operated with a 24 VDC Ex i power supply! General information on explosion protection, including installation regulations, can be found in the WAGO I/O System 750/753 manuals!

Technical data

Item description	2-Channel Analog Input; 4 … 20 mA HART; NAMUR NE43
Number of analog inputs	2
Total number of channels (module)	2
Signal type	Current
Signal type (current)	4 … 20 mADC
Sensor connection	2 x (2-wire)
Input filter	parameterizable
Input filter: parametrizable (channel by channel)	Yes
Signal characteristics	Single-ended
Sensor supply	16.5 VDC
Overvoltage protection	30 V, reverse polarity protected
Resolution [bit]	12 bits
Conversion time (typ.)	10 ms
Measurement error (reference temperature)	25 °C
Measurement error, deviation (max.) from the upper-range value	0.2 %
Temperature error (max.) of the upper-range value	±0.01 %/K
Intrinsically safe Ex i	Yes
Diagnostics	Wire break, short circuit, measurement range overflow/underflow
Data width	2 x 2-byte data; 2 x 2-byte data + 2n x 4-byte data (n = number of dynamic variables); 2 x 2-byte data + 6-byte mailbox
HART devices per channel	1 device (single-drop, no multi-drop)
HART modems per channel	1 modem (no multiplex)
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	25 mA
Supply voltage (field)	24 VDC; (Ex i power supply: U_o = max. 26.8 V); via power jumper contacts (supply via blade contact; distribution via spring contact)
Current consumption, field supply (module with no external load)	26 mA
Power consumption $P_{max.}$	1.60 W (with slaves (20 mA))
Power loss P_l	0.62 W (without slaves)
Isolation	300 VAC system/supply
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	1 A
Indicators	LED (A, E) green: Function HART 1, HART 2; LED (B, F) red: Error HART 1, HART 2

Explosion protection

Identification	**ATEX:** II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I **IECEx/INMETRO:** Ex ec [ia Ga] IIC T4 Gc; [Ex ia Da] IIIC; [Ex ia Ma] I **cULus (Devision classified):** Class I, Div. 2, Group A B C D, T4
Ex standard	EN IEC 60079-0, -7, -11
Safety-relevant data (circuit)	U_o = 26.8 V; I_o = 90.1 mA; P_o = 604 mW; linear characteristic curve
Reactances Ex ia IIC	L_o = 4.37 mH; C_o = 92 nF
Reactances Ex ia IIB	L_o = 17.51 mH; C_o = 720 nF
Reactances Ex ia IIA	L_o = 35.03 mH; C_o = 2.37 µF
Reactances Ex ia I	L_o = 57.48 mH; C_o = 4.2 µF
Reactances (note)	Reactances without accounting for the concurrence of capacitance (C_o) and inductance (L_o)

Continued on next page

Connection Data

Connection technology: I/O	6 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

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	1.691 MJ
Weight	91.9 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, horizontal bottom, 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
EMC emission of interference	per EN 61000-6-3, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143766654
Customs tariff number	85437090990

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Product Classification

UNSPSC	32151705
eCl@ss 10.0	27-24-26-01
eCl@ss 9.0	27-24-26-01
ETIM 9.0	EC001596
ETIM 10.0	EC001596
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

CAS-No.	11120-22-2 1303-86-2 1317-36-8 7439-92-1 79-94-7 872-50-4
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide Lead silicate N-Methylpyrrolidone
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	65198b56-6c5e-4e9b-bae6-440e83b5540e
SCIP notification number (Belgium)	320bcefd-799d-47d8-ad6b-665cabcffc71
SCIP notification number (Bulgaria)	c4510879-0c0d-4cc6-980d-545056447d70
SCIP notification number (Czech Republic)	c8f2ab1b-3b5f-4d3e-8a63-49661a2d1805
SCIP notification number (Denmark)	05cde903-f87f-4236-af30-3c8a8475d295
SCIP notification number (Finland)	9b0dfe1d-a9ee-49ba-84f0-11c98d2af7ca
SCIP notification number (France)	e6b04120-5655-4926-a5ff-7d114ce21156
SCIP notification number (Germany)	28e72eb1-798d-431d-a620-1656e409d94c
SCIP notification number (Hungary)	e0d07965-ce0f-4fa2-a83d-64aa578b7171
SCIP notification number (Italy)	e6a34f4a-4309-4fa1-a649-fe99ddc16c49
SCIP notification number (Netherlands)	72ee0f22-7a32-420a-9dc2-4275116d0b04
SCIP notification number (Poland)	18b50066-c7d6-4a19-8606-4369eeaa6a21
SCIP notification number (Romania)	6309a4bd-29d7-4dd0-b372-e67d35035c4f
SCIP notification number (Sweden)	b123c829-0270-49e6-bb03-d8d3e1656818

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)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

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

Continued on next page

Approvals for hazardous areas

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079	TUEV12ATEX106032X (Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
CCC CNEX	CNCA-C23-01	2020312310000211 (Ex ec [iaGa] IIC T4 Gc, [Ex iaDa] II-IC, [Ex iaMa] I)
IECEx TUEV Nord Cert GmbH	IEC 60079	IECEx TUN12.0039X (Ex ec [iaGa] IIC T4 Gc, [Ex iaDa] II-IC, [Ex iaMa] I)
INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
UKEx Element Materials Technology UK	-	EMA21UKEX0069X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-484/000-001	

Documentation

Manual

Product manual 2-channel analog input; 4 … 20 mA HART; NAMUR NE 43; Intrinsically safe	3941227147 | 3 | en-US | 2025-05-30 09:43 14.11.2025	pdf 4181.18 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	
Ex i Overview	pdf 442.07 KB	

Bid Text

750-484/000-001	19.02.2019	xml 8.15 KB	
750-484/000-001	13.09.2018	doc 34.50 KB	

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 143.96 KB	

Application Notes

Application Note CoDeSys 2.3

HART Tool Routing via ETHERNET with 750-820x/750-88x and CODESYS 2.3 (a116120)	1.0.0 22.03.2019	pdf 3798.36 KB	
HART Tool Routing via PROFIBUS with 750-833 and 750-333 (a116140)	1.0.0 22.03.2019	pdf 5214.96 KB	

Application Note e!COCKPIT

HART Tool Routing via ETHERNET with 750-820x and e!RUN-TIME (a116130)	1.0.0 22.03.2019	pdf 2867.01 KB	

CAD/CAE-Data

CAD data

2D/3D Models
750-484/000-001

CAE data

EPLAN Data Portal
750-484/000-001