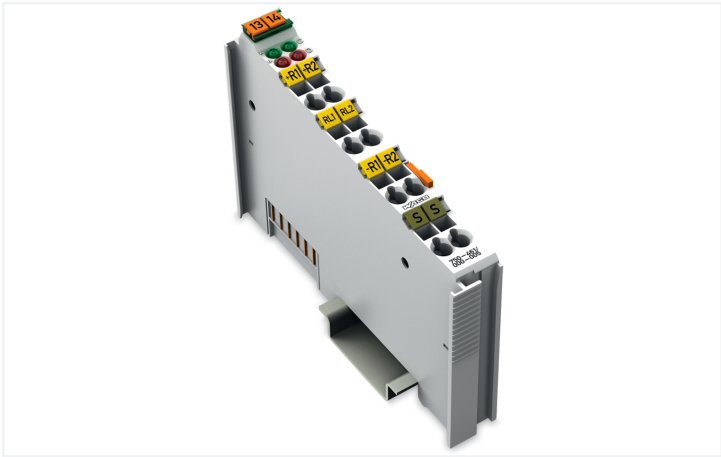
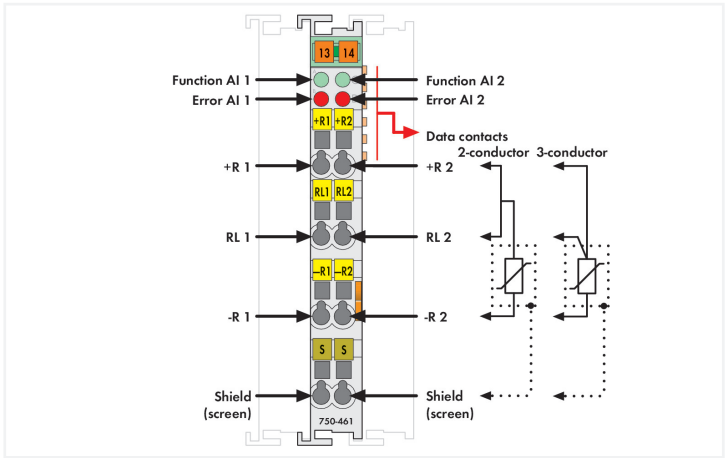
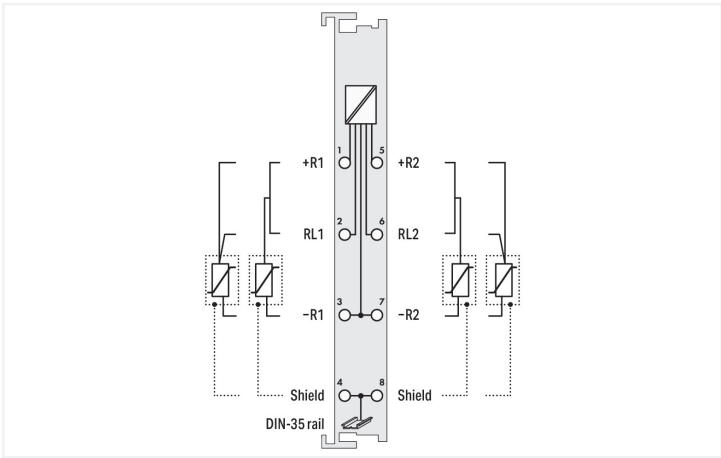
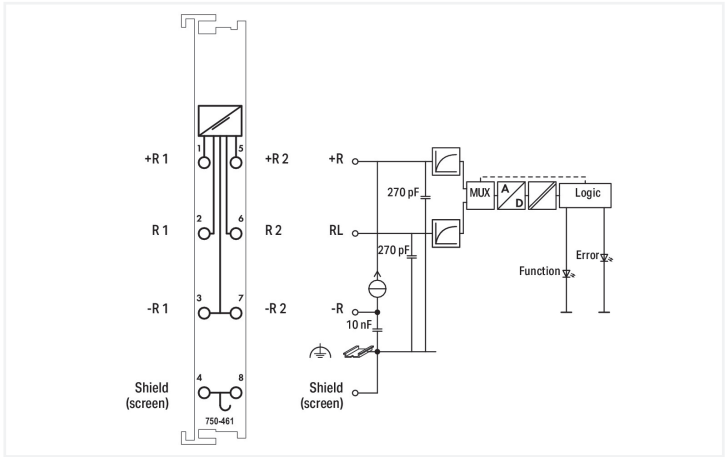




Color: ■ light gray



This analog input module directly connects to Ni resistance sensors. Two- or three-wire sensors can be connected. 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. A green LED indicates readiness for operation and error-free communication with the coupler. The shield directly connects to the DIN-rail.

Technical data	
Number of analog inputs	2
Total number of channels (module)	2
Signal type	Resistance measurement
Sensor connection	2 x (2-wire, 3-wire)
Data width	2 x 16-bit data; 2 x 8-bit control/status (optional)
Resolution (over entire range)	0.1 °C
Conversion time (typ.)	320 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
Measuring current (typ.)	0.5 mA
Response time (max.)	4 s
Sensor types	Ni1000 TK6180
Temperature range	-60 ... +250 °C
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	80 mA
Isolation	500 V system/field



Technical data	
Indicators	LED (A, C) green: Function AI 1, AI 2; LED (B, D) red: Error AI 1, AI 2
Connection data	
Connection technology: I/O	8 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	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	fixed
Material data	
Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.818 MJ
Weight	51.2 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 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 61000-6-4, 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	
Product Group	15 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4045454487058
Customs tariff number	85389099990

Product Classification	
UNSPSC	32101619
eCl@ss 10.0	27-24-26-01
eCl@ss 9.0	27-24-26-01
ETIM 9.0	EC001596
ETIM 8.0	EC001596
ECCN	NO US CLASSIFICATION

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	7(c)-I
SCIP notification number (Austria)	bf1a1197-86d4-4aeb-8fe3-13129f2a62b9
SCIP notification number (Belgium)	36159b2a-4b8e-4fb2-8e78-4f99e74b59aa
SCIP notification number (Bulgaria)	0d6dd130-8847-4488-8d54-1fa34b7364f4
SCIP notification number (Czech Republic)	59864dbd-cfbc-435e-aab2-162986c426a8
SCIP notification number (Denmark)	d1c5223c-87eb-4de6-b644-e314f33dc1e6
SCIP notification number (Finland)	f7674f79-32c4-46bf-afe3-27fb46033989
SCIP notification number (France)	48d7f56e-9939-41e4-8f2d-f74e23cd9598
SCIP notification number (Germany)	0d939c69-338b-4d35-ace1-22dd500f9b4a
SCIP notification number (Hungary)	1dbe4f75-0c06-4e58-958e-b0c37262462f
SCIP notification number (Italy)	81c8beb2-aad1-4859-b018-69a57624e93b
SCIP notification number (Netherlands)	6e44f9b8-143b-445d-b321-28c385e85b31
SCIP notification number (Poland)	5d9c616e-2ee0-4202-be9c-1b79a3322369
SCIP notification number (Romania)	b4667bcd-b5bb-4b93-a0de-48a144c8dbb4
SCIP notification number (Sweden)	828ba7e4-d960-4f10-909e-6465ffd62b8d

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-AIM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

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



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	22-2219060
BSH Bundesamt fuer See- schifffahrt und Hydrogra- phie	-	1104
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Ship- ping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
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)
IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	TÜV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-461/000-005

Documentation

Manual
Product Manual 2-channel Analog Input for Resistance Sensors
V 1.4.1
pdf 2916.84 KB
System Manual Series 750/753

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
750-461/000-005
19.02.2019
xml 4.59 KB
750-461/000-005
20.10.2017
doc 28.50 KB

Instruction Leaflet
CCC Ex (Additional information)
26.04.2023
pdf 159.76 KB



CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 750-461/000-005	EPLAN Data Portal 750-461/000-005
	WSCAD Universe 750-461/000-005
	ZUKEN Portal 750-461/000-005

Device Files	
Device Driver	
WAGO USB Service Ka- bel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014 zip 4721.96 KB

1 Compatible Products
1.1 Optional Accessories
1.1.1 DIN-rail
1.1.1.1 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

1.1.2 Marking
1.1.2.1 Group marker carrier
 Item No.: 750-106 Group marker carrier



1.1.2.2 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		

1.1.2.3 Marker carrier

 Item No.: 750-103 Group marker carrier

1.1.3 Shield termination

1.1.3.1 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	



1.1.4 System enclosure

1.1.4.1 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); WxHxD (164x100x164 mm); 9 x M12, 4 x M20
 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		