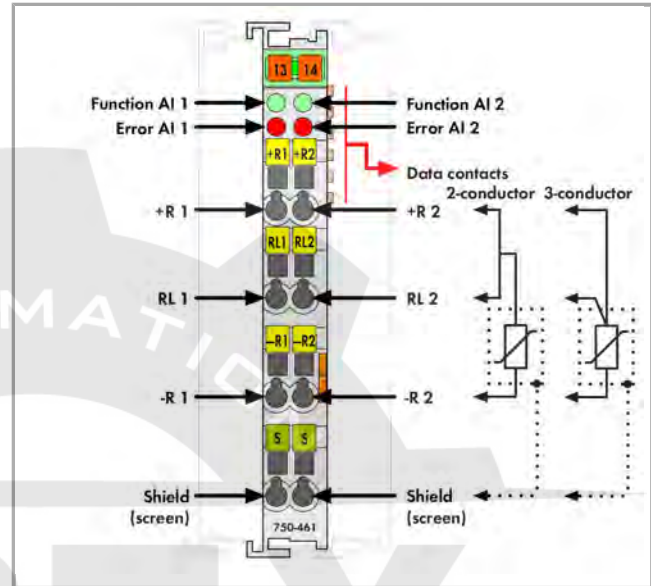
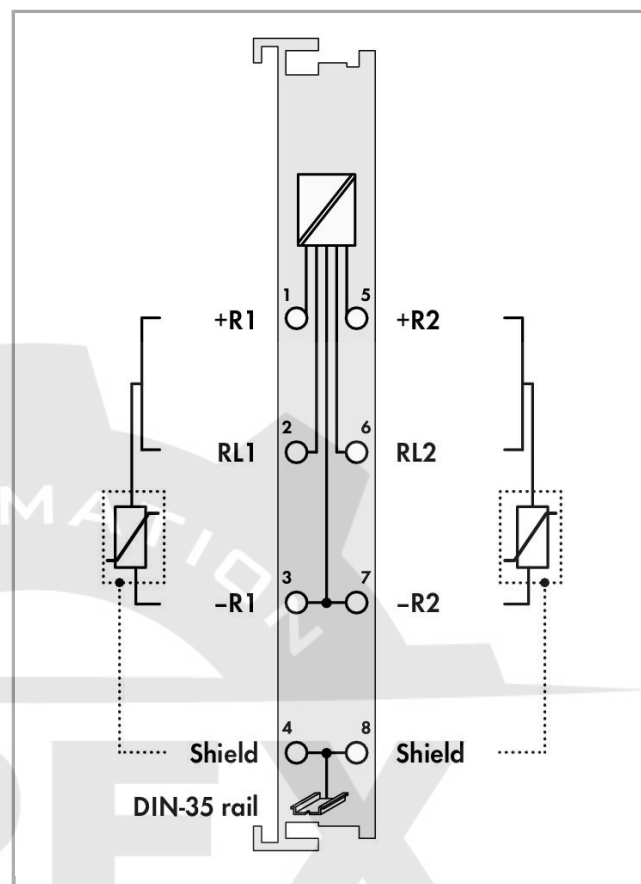
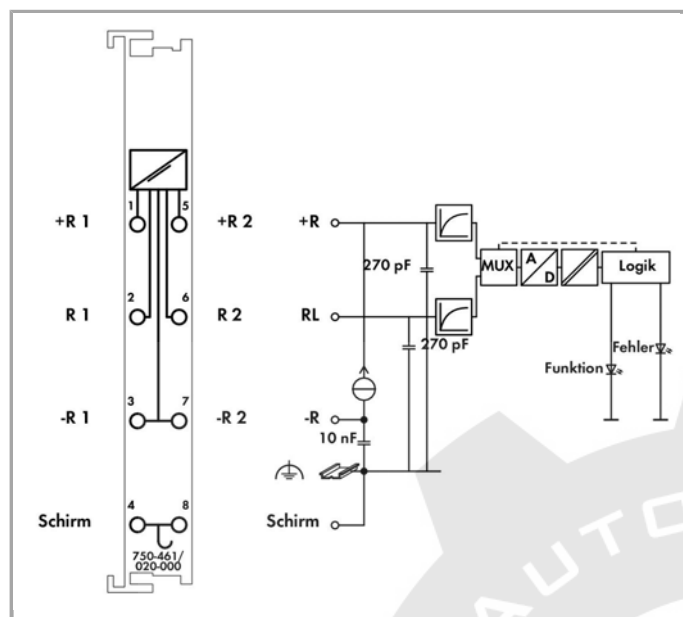






## Item description

The input module directly connects to NTC sensors.

The connection of 2- or 3-conductor sensors is possible.

The module automatically linearizes the entire temperature range. A sensor error is indicated by a red LED.

A green LED indicates readiness for operation and error-free communication with the buscoupler.

The shield (screen) is directly connected to the DIN rail.

## Data

### Technical Data

|                                   |                                                      |
|-----------------------------------|------------------------------------------------------|
| Number of analog inputs           | 2                                                    |
| Total number of channels (module) | 2                                                    |
| Type of signal                    | Resistance measurement                               |
| Sensor connection                 | 2 x (2-conductor)                                    |
| Bit 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                                               |
| Measuring error (25 °C)           | 0.5 - 3.0K (dependent on temperature)                |



|                                               |                                                   |
|-----------------------------------------------|---------------------------------------------------|
| Temperaturfehler max. vom Messbereichsendwert | 0.002 %/K                                         |
| Measuring current (typ.)                      | 0.05 mA                                           |
| Response time (max.)                          | 4 s                                               |
| Sensor types                                  | NTC 20kOhm                                        |
| Temperature range                             | -200 °C ... + 850 °C (Pt) -60 °C ... +250 °C (Ni) |
| System supply voltage                         | DC 5 V; via data contacts                         |
| Current consumption, system supply (5 V)      | 65 mA                                             |
| System and sensor supply voltage              | )                                                 |
| Isolation                                     | 500 V system/supply                               |

### Connection data

|                                    |                                  |
|------------------------------------|----------------------------------|
| Connection technology: In-/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 inch  |

### Geometrical Data

|                                       |                      |
|---------------------------------------|----------------------|
| Width                                 | 12 mm / 0.472 inch   |
| Height                                | 69.8 mm / 2.748 inch |
| Height from upper-edge of DIN-35 rail | 62.6 mm / 2.465 inch |
| Depth                                 | 100 mm / 3.937 inch  |

### Mechanical data

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

### Material Data

|                    |                              |
|--------------------|------------------------------|
| Color              | light gray                   |
| Housing material   | Polycarbonate, polyamide 6.6 |
| Weight             | 51.5 g                       |
| Conformity marking | 1                            |

### Environmental Requirements

|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| Surrounding air (operating) temperature | 0 ... 55 °C                             |
| Surrounding air (storage) temperature   | -40 ... 85 °C                           |
| Protection class                        | IP20                                    |
| Degree of pollution (5)                 | 2 per IEC 61131-2                       |
| Operating altitude                      | 0 ... 2000 m                            |
| Mounting position                       | horizontal (standing/lying) or vertical |

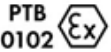
|                                                                                    |                                           |
|------------------------------------------------------------------------------------|-------------------------------------------|
| Relative air humidity (no condensation)                                            | 95 %                                      |
| Vibration resistance                                                               | 4g per IEC 60068-2-6                      |
| Shock resistance                                                                   | 15g per IEC 60068-2-27                    |
| EMC immunity to interference                                                       | acc. to EN 61000-6-2, marine applications |
| EMC emission of interference                                                       | acc. to 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 (Remote I/O) |
| Country of origin  | DE              |
| GTIN               | 4045454408046   |
| Customs Tariff No. | 85389099990     |

### Approvals / Certificates

#### Ex-Approvals

| Logo                                                                               | Approval                                                   | Additional Approval Text | Certificate name                  |
|------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------|-----------------------------------|
|  | ATEX<br>TUEV Nord Cert GmbH                                | EN 60079-0               | TÜV 07<br>ATEX<br>554086 X<br>en. |
|  | TUEV Nord<br>TUEV Nord Cert GmbH                           | IEC 60079-0              | IECEX<br>TUN<br>09.0001 X         |
|  | UL<br>Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | ANSI/ISA 12.12.01        | E198726<br>Sec.1                  |

#### Country specific Approvals

| Logo                                                                               | Approval                             | Additional Approval Text | Certificate name            |
|------------------------------------------------------------------------------------|--------------------------------------|--------------------------|-----------------------------|
|  | KC<br>National Radio Research Agency | Article 58-2, Clause 3   | MSIP-<br>REM-W43-<br>AIM750 |
|                                                                                    | KC<br>National Radio Research Agency | Article 58-2, Clause 3   | MSIP-<br>REM-W43-           |



AIM750

#### Ship Approvals

| Logo                                                                               | Approval                                                | Additional Approval Text | Certificate name      |
|------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------|-----------------------|
|    | <b>ABS</b><br>American Bureau of Shipping               | -                        | 19-<br>HG1821926      |
|    | <b>DNV GL</b><br>Det Norske Veritas, Germanischer Lloyd | -                        | TAA0000194            |
|    | <b>KR</b><br>Korean Register of Shipping                | -                        | HMB05880-<br>AC001    |
|   | <b>NK</b><br>Nippon Kaiji Kyokai                        | -                        | TA17255M              |
|  | <b>PRS</b><br>Polski Rejestr Statków                    | -                        | TE/2236<br>/880590/19 |
|  | <b>RINA</b><br>RINA Germany GmbH                        | -                        | ELE134212XG           |

#### UL-Approvals

| Logo                                                                               | Approval                                                            | Additional Approval Text | Certificate name |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------|------------------|
|  | <b>UL</b><br>UL International Netherlands B.V. (ORDINARY LOCATIONS) | UL 508                   | E175199<br>Sec.1 |

#### Compatible products

## Marking accessories

|                                                                                    |                                                                                                                               |          |          |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------|----------|
|    | <b>Item no.: 2009-145</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type         |          | 2009-145 |
|    | <b>Item no.: 2009-145/000-002</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-002 | 2009-145 |
|    | <b>Item no.: 2009-145/000-005</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-005 | 2009-145 |
|    | <b>Item no.: 2009-145/000-006</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-006 | 2009-145 |
|    | <b>Item no.: 2009-145/000-007</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-007 | 2009-145 |
|    | <b>Item no.: 2009-145/000-012</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-012 | 2009-145 |
|    | <b>Item no.: 2009-145/000-023</b><br>Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type  | /000-023 | 2009-145 |
|   | <b>Item no.: 2009-145/000-024</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-024 | 2009-145 |
|  | <b>Item no.: 248-501</b><br>Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card  |          | 248-501  |
|  | <b>Item no.: 248-501/000-002</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-002 | 248-501  |
|  | <b>Item no.: 248-501/000-005</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-005 | 248-501  |
|  | <b>Item no.: 248-501/000-006</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-006 | 248-501  |
|  | <b>Item no.: 248-501/000-007</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-007 | 248-501  |
|  | <b>Item no.: 248-501/000-012</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-012 | 248-501  |
|  | <b>Item no.: 248-501/000-017</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-017 | 248-501  |

**Item no.: 248-501/000-023**

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

/000-023

248-501

**Item no.: 248-501/000-024**

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

/000-024

248-501

**Item no.: 750-100**

Marker card; as a DIN A4 sheet; plain

750-100

**Item no.: 750-103**

Group marker carrier

750-103

**Item no.: 750-106**

Group marker carrier

750-106

**system box****Item no.: 850-804**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

850-804

**Item no.: 850-804/000-001**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

/000-001

850-804

**Item no.: 850-805**

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

850-805

**Item no.: 850-814/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

/002-000

850-814

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

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

/002-000

850-815

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

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

/002-000

850-816

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

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

/002-000

850-817

**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

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

850-826

**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

/002-000

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

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 grip

850-827

**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

850-828

**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

850-828

**Item no.: 850-834**

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

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

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

850-836

**Carrier rail****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

210-112

**Item no.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

210-113

**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

210-114

**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

210-115

**Item no.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-118

**Item no.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715

210-196

**Item no.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715

210-197

**Item no.: 210-198**

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-198

**Item no.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715

210-504

**Item no.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715

210-505

**Item no.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715

210-506

**Item no.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

210-508

**shield connection**

|                                                                                  |                                                                                                               |         |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 790-108</b><br>Shield clamping saddle; 11 mm wide; diameter of compatible conductor              | 790-108 |
|  | <b>Item no.: 790-116</b><br>Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm | 790-116 |
|  | <b>Item no.: 790-124</b><br>Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm | 790-124 |
|  | <b>Item no.: 790-140</b><br>Shield clamping saddle; diameter of compatible conductor                          | 790-140 |
|  | <b>Item no.: 790-208</b><br>Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm                                  | 790-208 |
|  | <b>Item no.: 790-216</b><br>Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm                                 | 790-216 |
|  | <b>Item no.: 790-220</b><br>Shield clamping saddle; 30 mm wide; 6 ... 20 mm                                   | 790-220 |

## Downloads

## Documentation

## Manual

|                                              |         |               |          |
|----------------------------------------------|---------|---------------|----------|
| 2-channel, resistance sensors<br>PT100 / RTD | V 1.4.1 | pdf<br>2.6 MB | Download |
|----------------------------------------------|---------|---------------|----------|

## Bid Text

|                               |             |                |          |
|-------------------------------|-------------|----------------|----------|
| 750-461/020-000<br>IO-Klemmen | Oct 2, 2014 | doc<br>29.7 kB | Download |
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## Additional Information

|                                                          |         |                 |          |
|----------------------------------------------------------|---------|-----------------|----------|
| Disposal; Electrical and electronic equipment, Packaging | V 1.0.0 | pdf<br>265.8 kB | Download |
|----------------------------------------------------------|---------|-----------------|----------|

## System Description

|                                                         |  |               |          |
|---------------------------------------------------------|--|---------------|----------|
| 750/753 Series I/O-System – General Product Information |  | pdf<br>1.7 MB | Download |
|---------------------------------------------------------|--|---------------|----------|

|                                                                                        |         |               |          |
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| Use in Hazardous Environments<br>Term definition, marking and installation regulations | V 1.0.0 | pdf<br>1.0 MB | Download |
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|                                           |  |                 |          |
|-------------------------------------------|--|-----------------|----------|
| Overview on WAGO-I/O-SYSTEM 750 approvals |  | pdf<br>780.2 kB | Download |
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|                                                                                    |         |               |          |
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CAD/CAE - Smart Data

CAD data

|                             |     |          |
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|-----------------------------|-----|----------|

Device Files

Device Driver

|                                                               |                         |               |          |
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| WAGO USB Service Cable Driver / 750 and 857 Series<br>759-923 | 6.5.3.0<br>Sep 10, 2014 | zip<br>4.8 MB | Download |
|---------------------------------------------------------------|-------------------------|---------------|----------|

Product family

**750/753 Series I/O-System**  
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