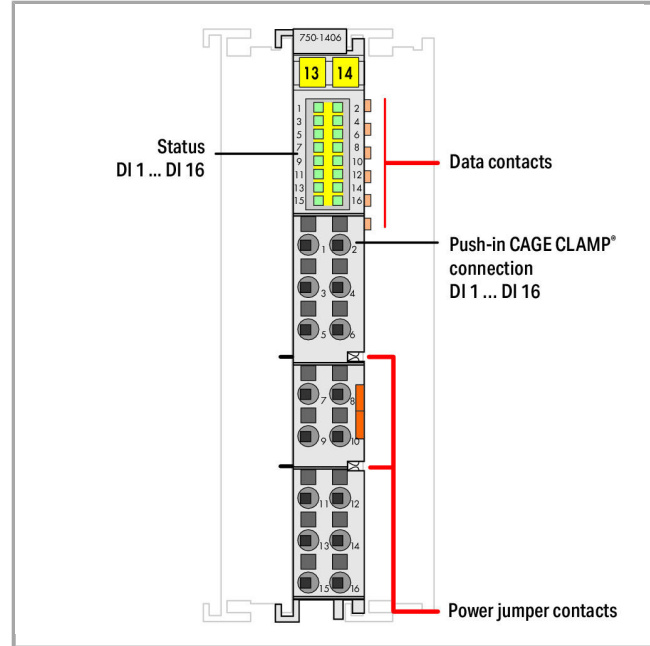
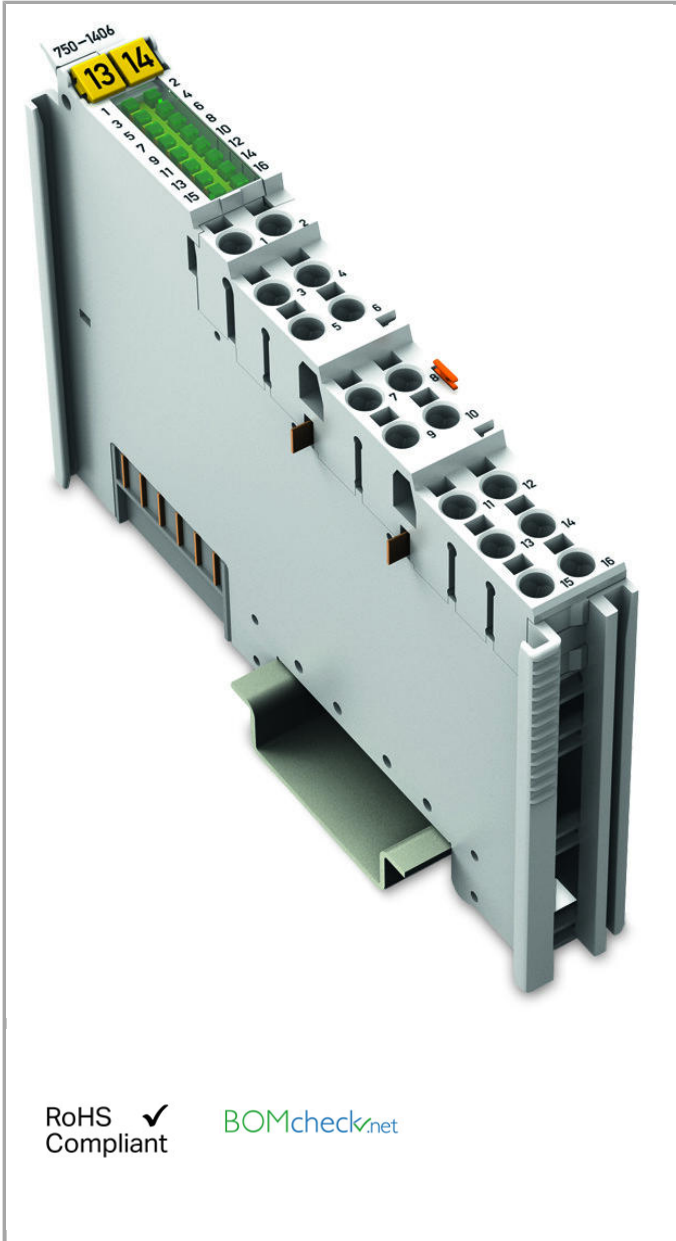
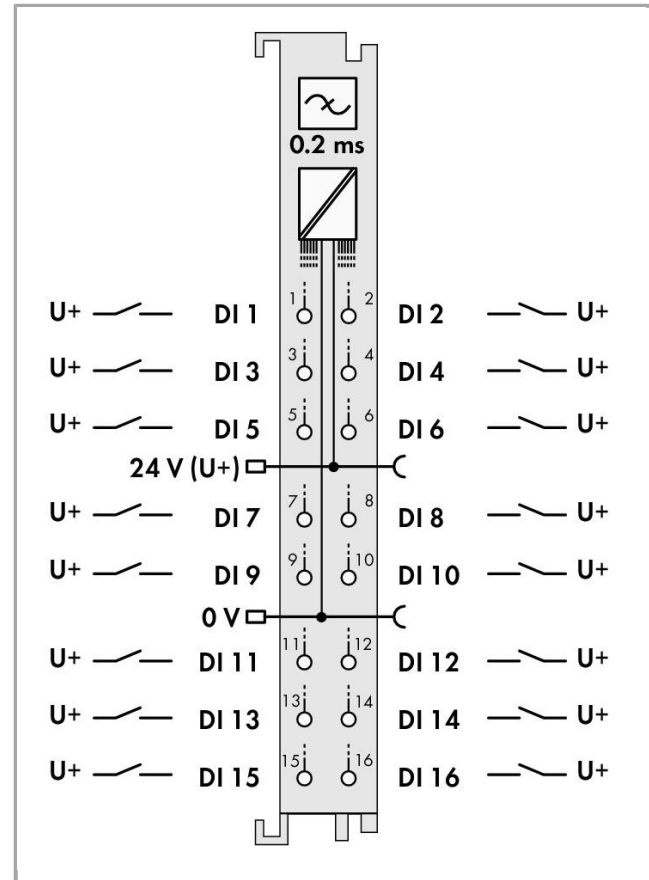
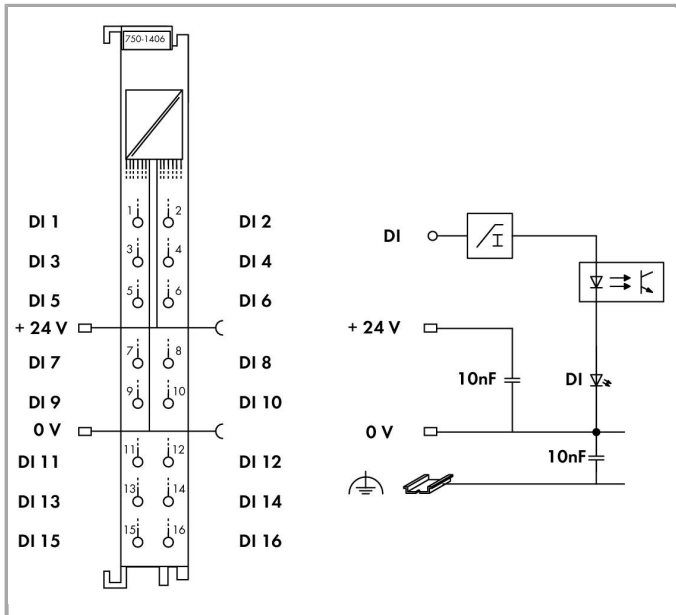


750-1406



RoHS Compliant



### Item description

The digital input module provides sixteen channels in a width of just 12 mm (0.47 inch).

The module features Push-in CAGE CLAMP® connections enabling solid conductors to be connected by simply pushing them in.

Each input channel has a noise-rejection RC filter with 0.2 ms time constant.

A green LED indicates the switched status of each channel.

Field and system levels are electrically isolated.

An operating tool with a 2.5 mm blade (210-719) is required to open the Push-in CAGE CLAMP® connections.

### Data

#### Technical Data

|                                   |                     |
|-----------------------------------|---------------------|
| Number of digital inputs          | 16                  |
| Total number of channels (module) | 16                  |
| Type of signal                    | Voltage             |
| Sensor connection                 | 16 x (1-conductor)  |
| Input characteristic              | high-side switching |
| Input filter (digital)            | 0.2 ms              |

|  |   |
|--|---|
| Input current per channel for signal (0) typ.          | 0.6 mA  |
| Input current per channel for signal (1) min.          | 2.1 mA  |
| Input current per channel for signal (1) max.          | 2.4 mA  |
| Voltage range for signal (0)                           | -3 ... +5 VDC   |
| Voltage range for signal (1)                           | 15 ... 30 VDC   |
| Max input data width (internal)                        | 16 Bit  |
| System supply voltage                                  | DC 5 V; via data contacts   |
| Current consumption, system supply (5 V)               | 25 mA   |
| System and sensor supply voltage                       | )   |
| Field supply voltage                                   | DC 24 V (-25 ... +30 %); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt) |
| Isolation field – system                               | 500 VAC (1 min)   |
| Indicators   | LED (1-16) green: Status DI 1 ... DI 16   |
| Number of incoming power jumper contacts               | 2   |
| Number of outgoing power jumper contacts               | 2   |
| Current carrying capacity of the power jumper contacts | 10 A  |

### Connection data

|                                    |  |
|------------------------------------|--|
| Connection technology: In-/Outputs | 16 x Push-in CAGE CLAMP®                     |
| Connection type (1)                | Inputs/Outputs                               |
| Solid conductor                    | 0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG |
| Fine-stranded conductor            | 0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG |
| Strip length                       | 8 ... 9 mm / 0.31 ... 0.35 inch              |
| Conductor type (1)                 | f-st   |
| Conductor type (2)                 | s  |
| Conductor type (1)                 | fine-stranded                                |
| Conductor type (2)                 | solid  |

### Geometrical Data

|                                       |                      |
|---------------------------------------|----------------------|
| Width                                 | 12 mm / 0.472 inch   |
| Height                                | 69 mm / 2.717 inch   |
| Height from upper-edge of DIN-35 rail | 61.8 mm / 2.433 inch |
| Depth                                 | 100 mm / 3.937 inch  |

### Mechanical data

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

### Material Data

|                  |                              |
|------------------|------------------------------|
| Housing material | Polycarbonate, polyamide 6.6 |
| Weight           | 47.5 g                       |

Conformity marking

1

## Environmental Requirements

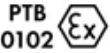


|  |   |
|--|---|
| Surrounding air (operating) temperature  | 0 ... 55 °C                               |
| Surrounding air (storage) temperature  | -40 ... 85 °C                             |
| Protection class   | IP20                                      |
| Degree of pollution (5)  | 2 per IEC 61131-2                         |
| 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 61000-6-3, 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               | 4050821107958   |
| 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>DIM750 |

## Ship Approvals

| Logo  | Approval   | Additional Approval Text | Certificate name      |
|---|--|--------------------------|-----------------------|
|     | ABS<br>American Bureau of Shipping               | -                        | 19-<br>HG1821926      |
|     | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                        | TAA0000194            |
|    | GL<br>Germanischer Lloyd                         | -                        | 11 631 - 10<br>HH     |
|  | LR<br>Lloyds Register                            | -                        | 02/20026 (E5)         |
|   | NK<br>Nippon Kaiji Kyokai                        | -                        | TA17255M              |
|  | PRS<br>Polski Rejestr Statków                    | -                        | TE/2236<br>/880590/19 |
|   | RINA<br>RINA Germany GmbH                        | -                        | ELE134212XG           |












## UL-Approvals


















| Logo | Approval   | Additional Approval Text | Certificate name |
|------|--|--------------------------|------------------|
|      | UL<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                             | 248-501<br>/000-006 |
|    | <b>Item no.: 248-501/000-007</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                             | 248-501<br>/000-007 |
|    | <b>Item no.: 248-501/000-012</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                             | 248-501<br>/000-012 |
|    | <b>Item no.: 248-501/000-017</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                             | 248-501<br>/000-017 |
|    | <b>Item no.: 248-501/000-023</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                             | 248-501<br>/000-023 |
|    | <b>Item no.: 248-501/000-024</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                             | 248-501<br>/000-024 |
|    | <b>Item no.: 750-103</b><br>Group marker carrier   | 750-103             |
|   | <b>Item no.: 750-107</b><br>Group marker carrier   | 750-107             |
| <b>Carrier rail</b>  |  |                     |
|  | <b>Item no.: 210-112</b><br>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             |
|  | <b>Item no.: 210-113</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715                  | 210-113             |
|  | <b>Item no.: 210-114</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715                   | 210-114             |
|  | <b>Item no.: 210-115</b><br>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             |
|  | <b>Item no.: 210-118</b><br>Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715                 | 210-118             |
|  | <b>Item no.: 210-196</b><br>Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715               | 210-196             |
|  | <b>Item no.: 210-197</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715                     | 210-197             |
|  | <b>Item no.: 210-198</b><br>Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715                | 210-198             |
|  | <b>Item no.: 210-504</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715        | 210-504             |

|  |   |         |
|--|---|---------|
|    | <b>Item no.: 210-505</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715     | 210-505 |
|    | <b>Item no.: 210-506</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715      | 210-506 |
|    | <b>Item no.: 210-508</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715        | 210-508 |
| <b>shield connection</b>   |   |         |
|    | <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 |
| <b>tools</b>   |   |         |
|  | <b>Item no.: 210-719</b><br>Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm                             | 210-719 |
| <b>system box</b>  |   |         |
|  | <b>Item no.: 850-804</b><br>IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip         | 850-804 |
|  | <b>Item no.: 850-804/000-001</b><br>IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip | 850-804 |
|  | <b>Item no.: 850-805</b><br>IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip         | 850-805 |
|  | <b>Item no.: 850-814/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate            | 850-814 |
|  | <b>Item no.: 850-815/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate            | 850-815 |
|  | <b>Item no.: 850-816/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate            | 850-816 |



|  |  |                     |
|--|--|---------------------|
|    | <b>Item no.: 850-817/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate                 | 850-817<br>/002-000 |
|    | <b>Item no.: 850-825</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20                               | 850-825             |
|    | <b>Item no.: 850-826</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip          | 850-826             |
|    | <b>Item no.: 850-826/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip  | 850-826<br>/002-000 |
|    | <b>Item no.: 850-827</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip          | 850-827             |
|    | <b>Item no.: 850-827/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip  | 850-827<br>/002-000 |
|    | <b>Item no.: 850-828</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip         | 850-828             |
|    | <b>Item no.: 850-828/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip | 850-828<br>/002-000 |
|  | <b>Item no.: 850-834</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20                               | 850-834             |
|  | <b>Item no.: 850-835</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip          | 850-835             |
|  | <b>Item no.: 850-836</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip          | 850-836             |
| <b>Supply module</b>   |  |                     |
|  | <b>Item no.: 750-601</b><br>Power Supply; 24 VDC   | 750-601             |
|  | <b>Item no.: 750-602</b><br>Power Supply; 24 VDC   | 750-602             |
|  | <b>Item no.: 750-610</b><br>Power Supply; 24 VDC; fuse holder; Diagnostics   | 750-610             |
|  | <b>Item no.: 750-612</b><br>Power Supply; 0 ... 230 V AC/DC  | 750-612             |

## Downloads

## Documentation

## Manual

16-channel, 24VDC, 0.2ms



|  |                         |                 |          |
|--|-------------------------|-----------------|----------|
| high-side switching  | V 1.2.1                 | pdf<br>1.9 MB   | Download |
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**750/753 Series I/O-System**

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