

## Technical data sheet

### Modular connection unit

Part no.: 50112891  
MA 248i Profinet Gateway

#### Contents

- Technical data
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- Operation and display
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Figure can vary



## Technical data

### Basic data

<b>Series</b>	MA 2xxi
<b>Suitable for</b>	BCL 2x series bar code readers
	BCL 8 series bar code readers
	BPS 8 series bar code positioning system
	DCR 200i series stationary 2D-code readers
	FIS series mobile 2D-code readers
	HFxx series mobile RFID read/write systems
	HS 65x8
	IT 1900g series mobile 2D-code readers
	IT 1902g series mobile 2D-code readers
	IT 1910 series mobile 2D-code readers
	IT 1911i series mobile 2D-code readers
	LSIS 222 series stationary 2D-code readers
	LSIS 4xxi series stationary 2D-code readers
	RFI
	RFM

### Electrical data

<b>Performance data</b>	
<b>Supply voltage U<sub>B</sub></b>	18 ... 30 V, DC
<b>Current consumption, max.</b>	300 mA

### Interface

<b>Type</b>	RS 232, PROFINET
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### Connection

<b>Number of connections</b>	6 Piece(s)
<b>Connection 1</b>	
<b>Function</b>	Connection to device
<b>Type of connection</b>	Plug connector
<b>Connection 2</b>	
<b>Function</b>	BUS OUT
<b>Type of connection</b>	Connector
<b>Thread size</b>	M12
<b>Type</b>	Female
<b>Material</b>	Plastic
<b>No. of pins</b>	4 -pin
<b>Encoding</b>	D-coded
<b>Connection 3</b>	
<b>Function</b>	BUS IN
<b>Type of connection</b>	Connector
<b>Thread size</b>	M12
<b>Type</b>	Female
<b>Material</b>	Metal
<b>No. of pins</b>	4 -pin
<b>Encoding</b>	D-coded

### Connection 4

<b>Function</b>	Voltage supply
<b>Type of connection</b>	Connector
<b>Thread size</b>	M12
<b>Type</b>	Male
<b>Material</b>	Metal
<b>No. of pins</b>	5 -pin
<b>Encoding</b>	A-coded

### Connection 5

<b>Function</b>	Voltage supply
<b>Type of connection</b>	Connector
<b>Thread size</b>	M12
<b>Type</b>	Male
<b>Material</b>	Metal
<b>No. of pins</b>	5 -pin
<b>Encoding</b>	A-coded

### Connection 6

<b>Function</b>	Service interface
<b>Type of connection</b>	Sub-D
<b>No. of pins</b>	9 -pin

### Mechanical data

<b>Dimension (W x H x L)</b>	107 mm x 40 mm x 180 mm
<b>Housing material</b>	Metal
<b>Net weight</b>	700 g

### Environmental data

<b>Ambient temperature, operation</b>	-30 ... 55 °C
<b>Ambient temperature, storage</b>	-20 ... 60 °C
<b>Relative humidity (non-condensing)</b>	5 ... 90 %

### Certifications

<b>Degree of protection</b>	IP 65
<b>Certifications</b>	c UL US

### Classification

<b>Customs tariff number</b>	85423190
<b>eCl@ss 5.1.4</b>	27069190
<b>eCl@ss 8.0</b>	27069190
<b>eCl@ss 9.0</b>	27069190
<b>eCl@ss 10.0</b>	27069190
<b>eCl@ss 11.0</b>	27069090
<b>ETIM 5.0</b>	EC001855
<b>ETIM 6.0</b>	EC001855
<b>ETIM 7.0</b>	EC001855

## Electrical connection

### Connection 1

### Leuze device

Function	Connection to device
Type of connection	Plug connector
No. of pins	10 pins -pin
	12 pins -pin
	6 pins -pin

### Connection 2

### BUS OUT

Function	BUS OUT
Type of connection	Connector
Thread size	M12
Type	Female
Material	Plastic
No. of pins	4 -pin
Encoding	D-coded

### Pin Pin assignment

1	TD+
2	RD+
3	TD-
4	RD-

### Connection 3

### BUS IN

Function	BUS IN
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

### Pin Pin assignment

1	TD+
2	RD+
3	TD-
4	RD-

### Connection 4

### PWR

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

### Pin Pin assignment

1	VCC
2	SWIO 2
3	GND
4	SWIO 1
5	FE

## Electrical connection

### Connection 5

### PWR

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

#### Pin Pin assignment

1	V_IN
2	SWIO 2
3	GND
4	SWIO 1
5	FE

### Connection 6

### SERVICE

Function	Service interface
Type of connection	Sub-D
No. of pins	9 -pin
Type	Male

#### Pin Pin assignment

1	n.c.
2	RxD Service
3	TXD service
4	n.c.
5	GND
6	n.c.
7	n.c.
8	n.c.
9	n.c.

## Operation and display

LED	Display	Meaning
1	Green, flashing	Device ok, initialization phase
	Red, continuous light	Device error
2	Green, continuous light	BUS OK
	Red, continuous light	Bus error
3	Green, continuous light	BUS OK
	Yellow, flashing	Data transmission active
4	Green, continuous light	BUS OK
	Yellow, flashing	Data transmission active

## Accessories

### Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50132079	KD U-M12-5A-V1-050	Connection cable	Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC
	50135074	KS ET-M12-4A-P7-050	Connection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

### Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50137078	KSS ET-M12-4A-M12-4A-P7-050	Interconnection cable	Suitable for interface: Ethernet Connection 1: Connector, M12, Axial, Male, D-coded, 4 -pin Connection 2: Connector, M12, Axial, Male, D-coded, 4 -pin Shielded: Yes Cable length: 1,000 mm Sheathing material: PUR

#### Note



A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.