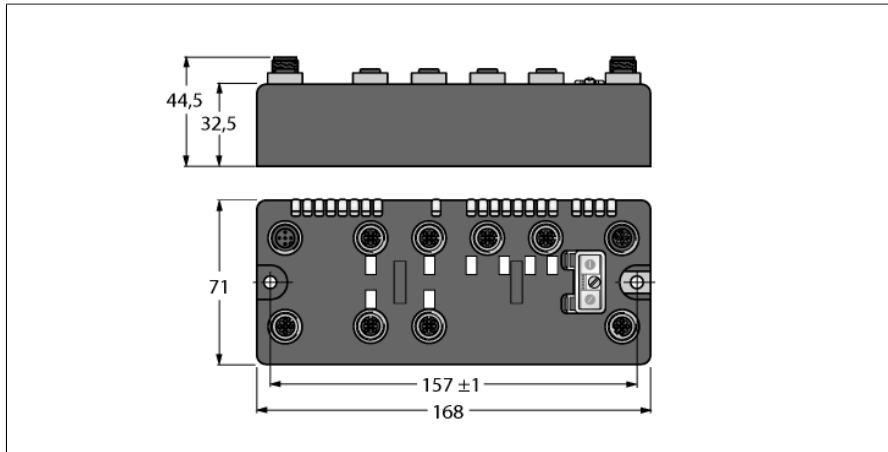


# BL compact Fieldbus Station for PROFIBUS-DP Interface for Connection of 2 BL ident® Read/Write Heads (HF/ UHF) and 8 Configurable Digital PNP Channels BLCDP-6M12LT-2RFID-S-8XSG-PD



Type	BLCDP-6M12LT-2RFID-S-8XSG-PD
ID	6811179
Nominal system voltage	24 VDC
System power supply	Via auxiliary power
Voltage supply connection	2 x M12, 5-pin
Admissible range Vi	18...30 VDC
Nominal current Vi	225 mA
Max. current Vi	2 A
Admissible range Vo	18...30 VDC
Nominal current Vo	100 mA
Max. current Vo	4 A
Electrical isolation	Die 8XSG I/O-Karten haben ein gemeinsames Bezugspotential für den Betrieb und Lastspannung aufgrund ihrer frei wählbaren digitalen Kanäle. Aus diesem Grund müssen alle Spannungsquellen (VI, VO, V+), die auf diesem Gerät vorhanden sind gleichzeitig an passende Netzteile angeschlossen werden.
Fieldbus transmission rate	9.6 kbps ... 12 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	0...99
Fieldbus addressing	2 dec. Rotary coding switches
Fieldbus connection technology	2 x M12 5-pin, reverse-keyed
Fieldbus termination	External
Service interface	RS232 interface

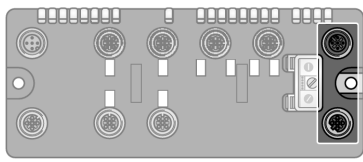
- On-Machine™ compact fieldbus I/O blocks
- PROFIBUS-DP slave
- 9.6 kbps ... 12 Mbps
- Two 5-pin, reverse-keyed M12 male receptacles for fieldbus connection
- 2 rotary coding switches for node-address
- IP 69K
- M12 I/O ports
- LEDs indicating status and diagnostics
- Electronics galvanically isolated from the field level via optocouplers
- 8 digitale PNP Kanäle, 24 VDC
- Max. 0,5 A pro Kanal
- Kanaldiagnose
- Wahl von Filterzeiten (Eingangsverzögerung)
- Invertierung der Eingänge möglich
- Simple RFID interface
- Connection of 2 BL ident read/write heads
- Max. cable length 50 m

Digital inputs	From 8XSG
Input type	PNP
Type of input diagnostics	Channel diagnostics
Sensor supply ( $V_{\text{SENS}}$ )	24 VDC, 100 mA kurzschlussbegrenzt
Low-level signal voltage	4.5 V
Low-level signal voltage	< 4.5 VDC
High-level signal voltage	7...30 VDC
Low-level signal current	< 1.5 mA
High-level signal current	2.1...3.7 mA
Input delay	0.25 or 2.5 ms (configurable)

Digital outputs	From 8XSG
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply ( $V_{\text{SENS}}$ )	24 VDC
Output current per channel	0.5 A
Output voltage	24 VDC from supply voltage
Output delay	3 ms
Load type	Resistive, inductive, lamp load
Load resistance, resistive	> 48 $\Omega$
Load resistance, inductive	< 1.2 H
Lamp load	< 3 W
Switching frequency, resistive	< 200 Hz
Switching frequency, inductive	< 2 Hz
Switching frequency, lamp load	< 20 Hz
Short-circuit protection	yes

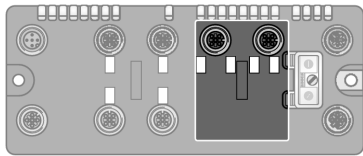
Technology	
Signal type	Simple RFID interface
Number of channels	2
Sensor supply	0.5 A per channel, short-circuit proof
Simultaneity factor	1
Transmission rate	115.2 kbps
Cable length	50 m
Electrical isolation	Electronics and field level isolated via optocouplers

Dimensions	168 x 71 x 32.5 mm
Mounting	2 x 5.4 mm diameter holes, 1.7 Nm torque
Weight	600 $\pm$ 20 g
Housing material	Glass fiber reinforced nylon, nickel-plated connector
Housing color	Black
Material screw	Nickel-plated brass
Material label	Polyester with polycarbonate overlay
Ground label material	Nickel-plated brass
Protection class	IP67 IP69K
Ambient temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	15...95 %, non-condensing
Vibration test	Acc. to IEC 61131-2
- up to 20 g (at 10 up to 150 Hz)	For mounting on base plate or machinery
Shock test	acc. to IEC 61131-2
Electromagnetic compatibility	Acc. to IEC 61131-2
Approvals and certificates	CE, cULus



### PROFIBUS-DP

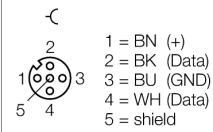
Fieldbus cable (example): RSSW RKSW 455-2M ident-no. U0350  
or RSSW-RKSW455-2M ident-no. 6602222



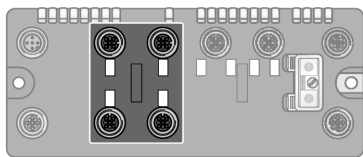
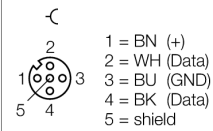
### Slot 1: RFID Channels

Extension cable (example): RK 4.5T-2-RS 4.5T/S2501 ident-no. U3-01243 or RK4.5T-2-RS4.5T/S2500 ident-no. 6699200

#### .../S2500 Connectors



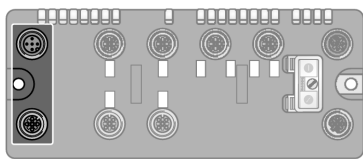
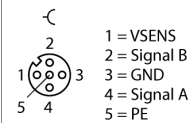
#### .../S2501 Connectors



### Slot 2: Digital Inputs and Outputs

Extension cable (example): RK 4.4T-2-RS 4.4T ident-no. U2445 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208

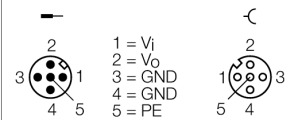
#### Pin Assignment



### Auxiliary Power

Extension cable (example): RKC 4.4T-2-RSC 4.4T ident-no. U5264 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208

#### Pin Assignment



**Status: Station LED**

LED	Color	Status	Description
IOs		OFF	Power off
	RED	ON	Insufficient power supply
	RED	FLASHING (1Hz)	Deviating station configuration
	RED	FLASHING (4 Hz)	No module bus communication
	GREEN	ON	Station OK
BUS		OFF	Keine Feldbus Kommunikation
	GREEN	ON	Feldbus Kommunikation aktiv
	GREEN	FLASHING (1 Hz)	No field bus communication active, device status OK
	RED	ON	Bus error at the gateway; no data exchange
	RED	FLASHING	Faulty PROFIBUS-DP address
BUS		OFF	Keine Feldbus Kommunikation
	GREEN	ON	Feldbus Kommunikation aktiv
	GREEN	FLASHING (1 Hz)	Keine Feldbuskommunikation aktiv, Gerätestatus OK
	RED	ON	Busfehler am Gateway; kein Datenaustausch
	RED	FLASHING	Fehlerhafte PROFIBUS-DP Adresse

**Status: I/O LED, slot 1**

LED	Color	Status	Description
D1 *		OFF	Diagnostic disabled
	RED	ON	Station / module bus communication failure
	RED	FLASHING (0.5Hz)	Summarized diagnostic
RW0 / RW1		OFF	No tag, diagnostic disabled
	GREEN	ON	Tag available
	GREEN	FLASHING (2 Hz)	Data exchange with tag enabled
	RED	ON	Read/write head fault
	RED	FLASHING (2 Hz)	Short-circuit in the supply line of read/write head

\* D1 LED also indicates gateway diagnostic

**I/O LED Status Slot 2**

LED	Colour	Status	Description
D2 *		OFF	Diagnostic disabled
	RED	ON	Station / module bus communication failure
	RED	FLASHING (0.5Hz)	Summarized diagnostic
XSG channels 0...7		OFF	Channel status x = "0" (OFF), no diagnostics active
	GREEN	ON	Channel status x = "1" (ON)
	RED	ON	Short-circuit at output
	RED	FLASHING (2 Hz)	Short-circuit sensor supply

\* The D2 LED also indicates gateway diagnosis

## I/O Data Map

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
RFID 1 <sub>0</sub>	0	Done	Busy	Error	Trans. Conn.	Trans. On	TP	TFR	-
	1	Error Cat. (Category Code)							
	2	Error Desc. (Description Code)							
	3	-	-	-	-	-	-	-	-
	4...11	Read Data (8 Byte)							
RFID 1 <sub>1</sub>	12	Done	Busy	Error	Trans. Conn.	Trans. On	TP	TFR	-
	13	Error Cat. (Category Code)							
	14	Error Desc. (Description Code)							
	15	-	-	-	-	-	-	-	-
	16...23	Read Data (8 Byte)							
	24	DI 2 <sub>7</sub>	DI 2 <sub>6</sub>	DI 2 <sub>5</sub>	DI 2 <sub>4</sub>	DI 2 <sub>3</sub>	DI 2 <sub>2</sub>	DI 2 <sub>1</sub>	DI 2 <sub>0</sub>
	25	-	-	-	-	-	-	-	-
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
RFID 1 <sub>0</sub>	0	Transceiver	Next	Tag ID	Read	Write	Tag Info.	Trans. Info.	Reset
	1	-	-	-	-	-	Byte Count 2	Byte count 1	Byte count 0
	2	Address High Byte (MSB)							
	3	Address Low Byte (LSB)							
	4...11	Write Data (8 Byte)							
RFID 1 <sub>1</sub>	12	Transceiver	Next	Tag ID	Read	Write	Tag Info.	Trans. Info.	Reset
	13	-	-	-	-	-	Byte Count 2	Byte count 1	Byte count 0
	14	Address High Byte (MSB)							
	15	Address Low Byte (LSB)							
	16...23	Write Data (8 Byte)							
	24	DO 2 <sub>7</sub>	DO 2 <sub>6</sub>	DO 2 <sub>5</sub>	DO 2 <sub>4</sub>	DO 2 <sub>3</sub>	DO 2 <sub>2</sub>	DO 2 <sub>1</sub>	DO 2 <sub>0</sub>
	25	-	-	-	-	-	-	-	-