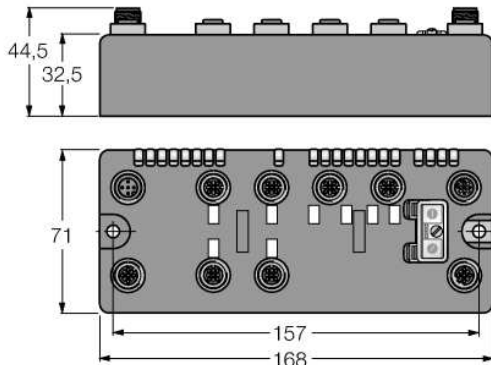




- Compact fieldbus I/O module in IP69K
- PROFIBUS-DP slave
- 9.6 kbps ... 12 Mbps
- Two 5-pole M12, reverse-keyed, connectors for fieldbus connection
- 2 rotary switches for node address
- IP69K
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- 8 Configurable digital PNP channels, 24 VDC
- Max. 0.5A per channel
- Channel diagnostics
- Selection of filtering times (Input delay)
- Invertible inputs
- Simple RFID interface
- Connection of 2 BL ident® read/write heads
- Max cable length of 50 m

Type code	BLCDP-6M12LT-2RFID-S-8XSG-PD
Ident no.	6811179

Nominal system voltage	24 VDC
System power supply	via auxiliary power
Voltage supply connection	2 x M12, 5-pole
Admissible range Vi	18...30VDC
Nominal current Vi	225 mA
Max. current Vi	2 A
Admissible range Vo	18...30VDC
Nominal current Vo	100 mA
Max. current Vo	4 A

Fieldbus transmission rate	9.6 kbps ... 12 Mbps
Adjustment transmission rate	auto detection
Fieldbus addressing range	0...99
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 x M12 5-pole, reverse keyed
Fieldbus termination	external
Service interface	RS232 interface

digital inputs	from 8XSG
Input type	PNP
Type of input diagnostics	Channel diagnostics
Sensor supply (V _{SENS})	24 VDC, 100 mA short-circuit limiting
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	(configurable) 0.25 or 2.5 ms

Digital outputs	from 8XSG
Output type	PNP
Type of output diagnostics	Channel diagnostics
Sensor supply (V _{SENS})	24 VDC
Output current per channel	0.5 A
Output voltage	24 VDC
Output delay	3 ms
Load type	resistive, inductive, lamp load
Load resistance, resistive	> 48 Ω
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	isolation of electronics and field level via optocouplers

Dimensions

Operating temperature	1680x 710x 325 mm
Storage temperature	-40...+70 °C
Relative humidity	-40...+85 °C
Vibration test	15 to 95% (non-condensing)
Extended vibration resistance	according to IEC 61131-2
- up to 20 g (at 10 to 150 Hz)	
Shock test	For mounting on base plate or machinery
Electro-magnetic compatibility	according to IEC 61131-2
Protection class	according to IEC 61131-2
Housing material	IP69K
Housing color	Glass-filled nylon, nickel plated brass connectors
Window material	Black
Screw material	Lexan
Label material	Nickel plated brass
Ground tab material	Polyester with Polycarbonate overlay
Weight	Nickel plated brass
Approvals and certificates	600 ± 20 g
	CE, cULus

	Fieldbus cable (example): RSSW RKSW 455-2M ident-no. U0350 or RSSW-RKSW455-2M ident-no. 6602222	1 = 5 V 2 = BUS-A 3 = GND 4 = BUS-B 5 = n.c. thread = shield
	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	Connectors .../S2500 1 = BN (+) 2 = BK (Data) 3 = BU (GND) 4 = WH (Data) 5 = shield
	Extension cable (example): RK 4.4T-2-RS 4.4T ident-no. U2445 or RKC4.4T-2-RSC4.4T/TEL ident-no. 6625208	Connectors .../S2501 1 = BN (+) 2 = WH (Data) 3 = BU (GND) 4 = BK (Data) 5 = shield
	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 1 = V_i 2 = V_o 3 = GND 4 = GND 5 = PE

Status: Station LED

LED	Color	Status	Description
IOs		OFF	No power supply
	RED	ON	Insufficient power supply
	RED	FLASHING (1Hz)	Deviating station configuration
	RED	FLASHING (4 Hz)	No module bus communication
	GREEN	ON	Station OK
	GREEN	FLASHING	Force mode active
BUS		OFF	No field bus communication
	GREEN	ON	Field bus communication active
	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	No field bus communication
	GREEN	ON	Field bus communication active
	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

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)	Group 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	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Any diagnostics active
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

* D2 LED also reports gateway diagnostics

I/O Data Map

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
RFID 1 ₀	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 ₁	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 ₇	DI 2 ₆	DI 2 ₅	DI 2 ₄	DI 2 ₃	DI 2 ₂	DI 2 ₁	DI 2 ₀
	25	-	-	-	-	-	-	-	-
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
RFID 1 ₀	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 ₁	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 ₇	DO 2 ₆	DO 2 ₅	DO 2 ₄	DO 2 ₃	DO 2 ₂	DO 2 ₁	DO 2 ₀
	25	-	-	-	-	-	-	-	-