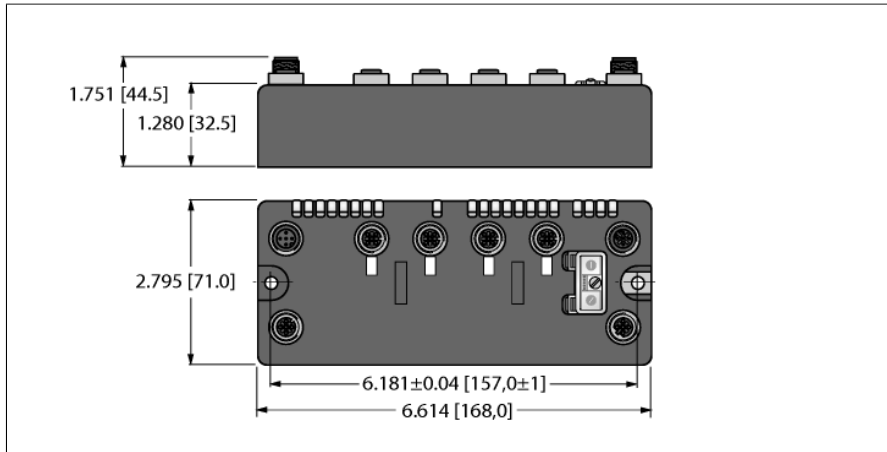


BL compact™ fieldbus station for PROFINET®

Interface for Connection of 4 BL ident Read/Write Heads (HF/UHF)

BLCEN-4M12LT-2RFID-A-2RFID-A

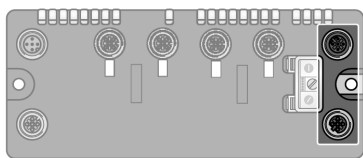


Type	BLCEN-4M12LT-2RFID-A-2RFID-A
ID	6811496
Nominal system voltage	24 VDC
System power supply	Via auxiliary power
Voltage supply connection	2 x M12, 5-pin
Admissible range Vi	18...30 VDC
Nominal current Vi	175 mA
Max. current Vi	2 A
Admissible range Vo	18...30 VDC
Max. current Vo	4 A
Fieldbus transmission rate	10/100 Mbps
Adjustment transmission rate	Automatic detection
Fieldbus address range	1...92 0 (192.168.1.254) 93 (BOOTP) 94 (DHCP) 95 (PGM) 96 (PGM-DHCP) *recommended for PROFINET 97...99 (manufacturer specific)
Fieldbus addressing	2 decimally coded rotary switches
Fieldbus connection technology	2 x M12 4-pole, D-coded
Web server	Integrated
Service interface	Ethernet
Product code	11496

- On-machine Compact fieldbus I/O block
- PROFINET slave
- Integrated Ethernet Switch
- 10 Mbps / 100 Mbps supported
- Two 4-pole M12, D-coded, connectors for fieldbus connection
- 2 rotary switches for node address
- IP67, IP69K
- M12 I/O connectors
- LEDs indicating status and diagnostics
- Electronics galvanically separated from the field level via optocouplers
- Advanced RFID interface
- Software function block (PIB) required for control
- Connection of 4 BL ident® read/write heads
- Max cable length of 50 m

PROFINET	
Addressing	DCP
Conformance class	B (RT)
MinCycleTime	1 ms
Diagnostics	acc. to PROFINET alarm handling
Topology detection	supported
Automatic addressing	supported
Media Redundancy Protocol (MRP)	supported
Input Data Size	max. 8 BYTE
Output Data Size	max. 8 BYTE
Technology	
Signal type	Advanced RFID Interface
Number of channels	4
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	
Mounting	168 x 71 x 32.5 mm
Weight	2 × 5.4 mm diameter holes, 1.7 Nm torque
Housing material	530 ± 20 g
Housing color	Glass-filled nylon, nickel plated brass connectors
Material screw	Black
Material label	Nickel-plated brass
Ground label material	Polyester with polycarbonate overlay
Protection class	Nickel plated brass
Ambient temperature	IP67
Storage temperature	IP69K
Relative humidity	-40...+70 °C
Vibration test	-40...+85 °C
- up to 20 g (at 10 up to 150 Hz)	15 to 95% (non-condensing)
Shock test	Acc. to IEC 61131-2
Electromagnetic compatibility	For mounting on base plate or machinery
Approvals and certificates	according to IEC 61131-2
	Acc. to IEC 61131-2
	CE, cULus

Pinning and wiring diagram

	Ethernet Fieldbus cable (IP67 example): RSSD RSSD 441-2M ID number U-02482 or RSSD-RSSD-441-2M/S2174 ID number 6914218	Pin Assignment (M12, D-code)  1 = TD + 2 = RD + 3 = TD - 4 = RD -  1 = TD + 2 = RD + 3 = TD - 4 = RD -
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Station LED status

LED	Color	Status	Description
IOs		OFF	No power
	RED	ON	Low power or station error
	RED	FLASHING (1 Hz)	I/O module configuration error
	RED	FLASHING (4 Hz)	No I/O module bus communication
	GREEN	ON	Station ok
	GREEN	FLASHING	Force mode active
BUS		OFF	Power Off
	GREEN	ON	Connected to Master
	GREEN	FLASHING	Ready
	GREEN	FLASHING 3x (1Hz)	ARGE Running
	RED	ON	Error
	RED	FLASHING	WINK
LNK/ACT	YELLOW	ON	DHCP/BOOTP Search
		OFF	No Link
	GREEN	ON	Link
	GREEN	FLASHING	Traffic
	YELLOW	ON	100 Mbit Linked

I/O LED status slot 1

LED	Color	Status	Description
D1 *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Diagnostics active (Slot 1)
RW0 / RW1		OFF	No tag present, no diagnostics active
	GREEN	ON	Tag present
	GREEN	FLASHING (2 Hz)	Data communication from / to tag active
	RED	ON	Error in the R/W head
	RED	FLASHING (2 Hz)	Short circuit in the transceiver supply

* D1 LED also indicates gateway diagnostics

I/O LED status slot 2

LED	Color	Status	Description
D2 *		OFF	No diagnostics active
	RED	ON	Station error/ module bus communication failure
	RED	FLASHING (0.5Hz)	Diagnostics active (Slot 2)
RW0 / RW1		OFF	No tag present, no diagnostics active
	GREEN	ON	Tag present
	GREEN	FLASHING (2 Hz)	Data communication from / to tag active
	RED	ON	Error in the R/W head
	RED	FLASHING (2 Hz)	Short circuit in the transceiver supply

* D2 LED also indicates gateway diagnostics

PROFINET® Process Data

	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Inputs	0	Status Word RFID 1 _o – Low Byte (LSB)							
	1	Status Word RFID 1 _o – High Byte (MSB)							
	2	Status Word RFID 1 _i – Low Byte (LSB)							
	3	Status Word RFID 2 _i – High Byte (MSB)							
	4	Status Word RFID 2 _o – Low Byte (LSB)							
	5	Status Word RFID 2 _o – High Byte (MSB)							
	6	Status Word RFID 2 _i – Low Byte (LSB)							
	7	Status Word RFID 2 _i – High Byte (MSB)							
Outputs	0	Control Word RFID 1 _o – Low Byte (LSB)							
	1	Control Word RFID 1 _o – High Byte (MSB)							
	2	Control Word RFID 1 _i – Low Byte (LSB)							
	3	Control Word RFID 1 _i – High Byte (MSB)							
	4	Control Word RFID 2 _o – Low Byte (LSB)							
	5	Control Word RFID 2 _o – High Byte (MSB)							
	6	Control Word RFID 2 _i – Low Byte (LSB)							
	7	Control Word RFID 2 _i – High Byte (MSB)							

ATTENTION !

A Proxy Ident Function Block (PIB) is necessary to control the RFID-A module. It can not be done with the Status and Control words of the process data directly!