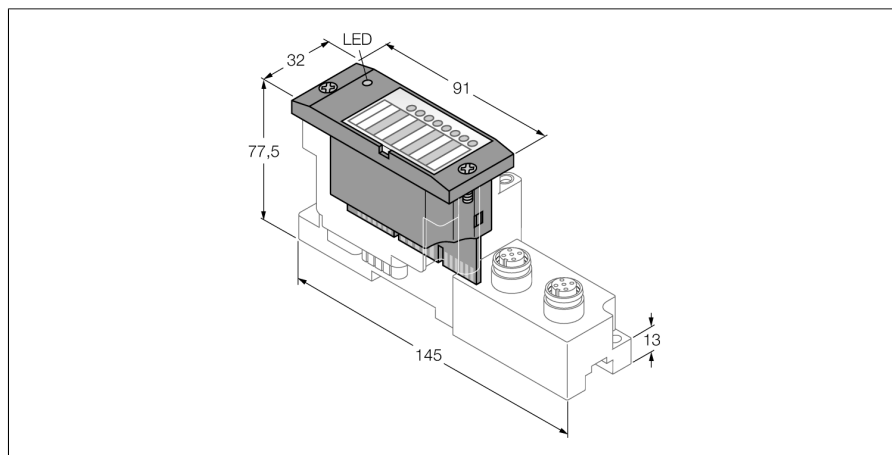


BL67 Electronic Module

2 RFID Channels (HF/UHF)

BL67-2RFID-S



- A special software (function module) for integration in PLC systems is not required.
- 8 byte user data per read/write cycle
- LEDs indicate status and diagnostic
- Electronics galvanically separated from the field level via optocouplers
- Connection of two BL ident read/write heads
- Mixed operation of HF and UHF read/write heads
- Transmission rate: 115.2 kbps
- Cable length max. 50 m

Functional principle

BL ident can be integrated into your plant structure in many different ways.

Various fieldbus standards such as PROFIBUS-DP, EtherNet/IP, Ethernet Modbus TCP, DeviceNet, CANopen und PROFINET IO enable a flexible integration.

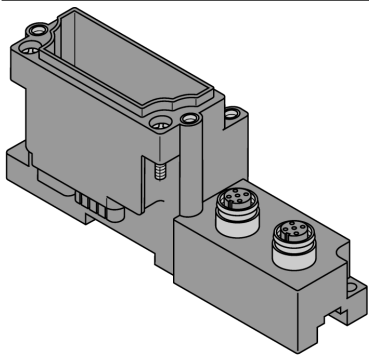
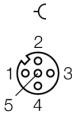
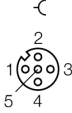
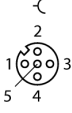
BL ident simple electronic modules (BL20-2RFID-S, BL67-2RFID-S) can be integrated into existing control or host systems without function block, since standard input/output process data is used for communication.

Programmable gateways with peripheral pre-processing function to relieve the higher-level control and bus system.

Preassembled sets (2, 4, 6 or 8-port), easily mounted, available for all fieldbus networks.

Type	BL67-2RFID-S
ID	6827305
Number of channels	2
Supply voltage	24 VDC
Nominal voltage V_i	24 VDC
Nominal current from field supply	≤ 100 mA
Nominal current from module bus	≤ 30 mA
Power dissipation, typical	≤ 1 W
Transmission rate	115.2 kbps
Cable length	50 m
Electrical isolation	isolation of electronics and field level via optocouplers
Output connectivity	M12
Sensor supply	0.5 A per channel, short-circuit proof
Dimensions (W x L x H)	32 x 91 x 59 mm
Approvals	CE, cULus
Ambient temperature	-40...+70 °C
Storage temperature	-40...+85 °C
Relative humidity	5...95 % (internal), level RH-2, no condensation (when stored at 45 °C)
Vibration test	Acc. to EN 61131
- up to 5 g (at 10 to 150 Hz)	for mounting on DIN rail no drilling according to EN 60715, with end bracket
- up to 20 g (at 10 up to 150 Hz)	for mounting on base plate or machinery Therefore every second module has to be mounted with two screws each.
Shock test	Acc. to IEC 60068-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 61131-2
Protection class	IP67
MTTF	212 years acc. to SN 29500 (Ed. 99) 40 °C
Tightening torque fixing screw	0.9...1.2 Nm

Compatible base modules

Dimension drawing	Type	Pin configuration
	BL67-B-2M12 6827186 2 x M12, 5-pole, female, a-coded Comments Matching connection cable (for example): RK4.5T-5-RS4.5T/S2500 Ident no. 6699201	.../S2500 Connectors  1 = BN (+) 2 = BK (Data) 3 = BU (GND) 4 = WH (Data) 5 = shield .../S2501 Connectors  1 = BN (+) 2 = WH (Data) 3 = BU (GND) 4 = BK (Data) 5 = shield Connectors .../S2503  1 = RD (+) 2 = BU (Data) 3 = BK (GND) 4 = WH (Data) 5 = shield

LED display

LED	Color	Status	Meaning
D		OFF	No error message or diagnostics active.
	RED	ON	Failure of module bus communication. Check if more than 2 adjacent electronic modules are pulled. Relevant modules are located between gateway and this module.
	RED	FLASHING (0.5 Hz)	Upcoming module diagnostics
RW0 / RW1		OFF	No tag, no active diagnostics
	GREEN	ON	Tag available
	GREEN	FLASHING (2 Hz)	Data exchange with tag enabled
	RED	ON	Read/write head error
	RED	FLASHING (2 Hz)	Short-circuit in the supply line of read/write head

Compatible gateways

ID	Type	Communication	Version and higher	Application
6827232	BL67-GW-DPV1	PROFIBUS-DP	FW 1.11	PLC systems with PROFIBUS-DP master. Neither acyclic services nor function modules are required.
6827183	BL67-GW-DN	DeviceNet	FW 6.02	PLC systems with DeviceNet scanner (master).
6827200	BL67-GW-CO	CANopen	FW 3.03	PLC systems with CANopen master. Neither special services nor function modules are required.
6827214	BL67-GW-EN	Modbus TCP PROFINET EtherNet/IP	FW 3.0.2.0	PLC systems with Modbus TCP master or PC-based solutions using a Modbus driver software.
Compatible CODESYS V3 programmable gateways				
6827394	BL67-PG-EN-V3	Modbus TCP PROFINET EtherNet/IP	FW V1.0.7.0	PLC systems with Modbus TCP master or PC-based solutions using Modbus driver software. PLC systems with EtherNet/IP scanner (master). PLC systems with PROFINET master.
100000041	BL67-PG-EN-V3-WV	Modbus TCP PROFINET EtherNet/IP	FW V1.0.7.0	PLC systems with Modbus TCP master or PC-based solutions using Modbus driver software. PLC systems with EtherNet/IP scanner (master). PLC systems with PROFINET master.

I/O Data Mapping

INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
INPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Channel 0	0	DONE	BUSY	ERROR	XCVR CON	XCVR ON	TP	TFR	Reserved
	1	Error Code							
	2	Error Code 1							
	3	Reserved							
	4	READ DATA (8 Byte)							
	5								
	...								
	10								
	11								
Channel 1	12	DONE	BUSY	ERROR	XCVR CON	XCVR ON	TP	TFR	Reserved
	13	Error Code							
	14	Error Code 1							
	15	Reserved							
	16	READ DATA (8 Byte)							
	17								
	...								
	22								
	23								
OUTPUT	BYTE	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Channel 0	0	XCVR	NEXT	TAG ID	READ	WRITE	TAG INFO	XCVR INFO	RESET
	1	Reserved					Byte Count 2	Byte Count 1	Byte Count 0
	2	Address high byte							
	3	Address low byte							
	4	WRITE DATA (8 Byte)							
	5								
	...								
	10								
	11								
Channel 1	12	XCVR	NEXT	TAG ID	READ	WRITE	TAG INFO	XCVR INFO	RESET
	13	Reserved					Byte Count 2	Byte Count 1	Byte Count 0
	14	Address high byte							
	15	Address low byte							
	16	WRITE DATA (8 Byte)							
	17								
	...								
	22								
	23								

n = process data offset of the input data depending on station configuration and the corresponding fieldbus.

m = process data offset of the output data depending on station configuration and the corresponding fieldbus.

With PROFIBUS, PROFINET and CANopen, the I/O data of this module is localized

within the process data of the whole station via the hardware configuration tool of the fieldbus master.

With DeviceNet™, EtherNet/IP™ and Modbus TCP a detailed mapping table can be created

with the TURCK configuration tool I/O-ASSISTANT.