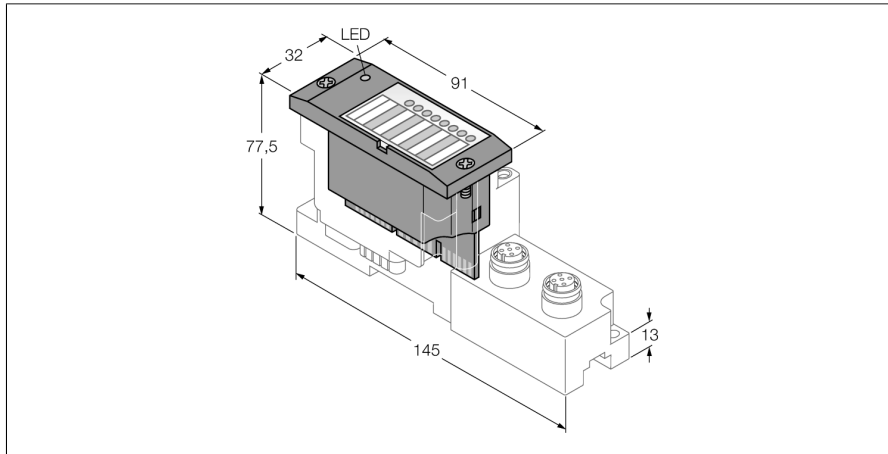


BL67 Electronic Module

2 RFID Channels (HF/UHF)

BL67-2RFID-A



- This module is used with the BL67-GW-DPV1
- Protection class IP67
- 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

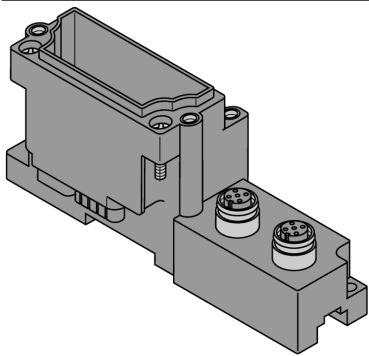
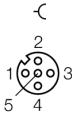
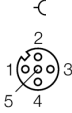
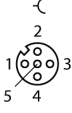
Functional principle

BL67 electronic modules are plugged on the purely passive base modules which in turn are connected to the field devices. The separation of connection level and electronics simplifies maintenance considerably. Flexibility is enhanced because the user can choose between base modules with different connection technologies.

The electronic modules are completely independent of the higher level fieldbus through the use of gateways.

Type	BL67-2RFID-A
ID	6827225
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 (L)	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): RK4.5T5-RS4.5T/S2500 Ident-No. 6699201	Connector .../S2500  1 = BN (+) 2 = BK (Data) 3 = BU (GND) 4 = WH (Data) 5 = shield Connector .../S2501  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 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

Compatible gateways

ID	Type	Communication	Version and higher	Application
6827232	BL67-GW-DPV1	PROFIBUS-DP	FW 1.10	Siemens PLC systems with Profibus DPV1 master and PIB (Proxy Ident Block) function block. The PIB is required for controlling the RFID system and uses internally acyclic services.
6827214	BL67-GW-EN	Modbus TCP PROFINET EtherNet/IP	FW 3.0.2.0	Siemens PLC systems with PROFINET master. (Modbus TCP and EtherNet/IP are not supported by the BL20-2RFID-A)

Compatible CODESYS V3 programmable gateways

ID	Type	Communication	Version and higher	Application
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 a 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 1.0.7.0	PLC systems with Modbus TCP master or PC-based solutions using a Modbus driver software. PLC systems with EtherNet/IP scanner (master). PLC systems with PROFINET master.

The CODESYS programmable gateways can be used for quick and decentralized preprocessing or as a stand-alone solution. The CODESYS PIB (Proxy Ident Block) function block is required in every case. The library with the PIB is included in the CODESYS target files.