

- 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 2 BL ident read/write heads
- Mixed operation of HF and UHF read/write heads
- Transmission rate: 115.2 kbps
- Cable length: 50 m max.

<b>Type</b>	BL67-2RFID-S
Ident-No.	6827305
<b>Number of channels</b>	2
Supply voltage	24 VDC
Nominal voltage V <sub>n</sub>	24 VDC
Rated current from field supply	≤ 100 mA
Rated current from module bus	≤ 30 mA
Power loss, typical	≤ 1 W
<b>Transmission rate</b>	115.2 kbps
Cable length	50 m
Electrical isolation	isolation of electronics and field level via optocouplers
<b>Connection technology</b>	M12
<b>Simultaneity factor</b>	1
<b>Sensor supply</b>	0.5 A per channel, short-circuit proof
<b>Dimensions (W x L x H)</b>	32x91x59mm
Approvals	CE, cULus
Operating temperature	-40...+70 °C
Storage temperature	-40 ... +85 °C
Relative humidity	5 to 95% (internal), Level RH-2, no condensation (at 45 °C storage)
Vibration test	acc. to EN 61131
Extended vibration resistance	
- 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 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 68-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electro-magnetic compatibility	acc. to EN 61131-2
Protection class	IP67
Tightening torque fixing screw	0.9...1.2 Nm

### Functional principle

BL ident® can be integrated in your installation in various different ways.

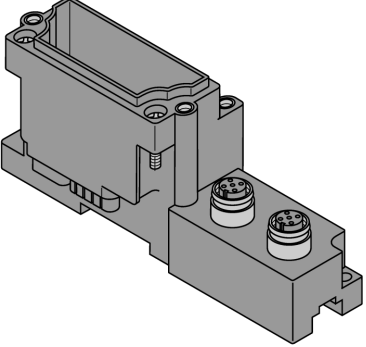
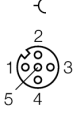
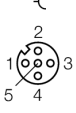
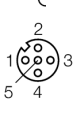
Various fieldbus standards such as PROFIBUS-DP, EtherNet/IP, Ethernet Modbus TCP, DeviceNet™, CANopen und PROFINET IO enable a flexible integration.

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

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

Premounted sets (2, 4, 6 or 8-port) for all fieldbus networks reduce the mounting effort.

Compatible base modules

Dimension drawing	Type	Pin configuration
	<p><b>BL67-B-2M12</b>          6827186          2 x M12, 5-pole, female, a-coded</p> <p><b>Comments</b>          Matching connection cable (for example):          RK4.5T-5-RS4.5T/S2500          Ident no. 6699201</p>	<p>Connectors .../S2500</p>  <ul style="list-style-type: none"> <li>1 = BN (+)</li> <li>2 = BK (Data)</li> <li>3 = BU (GND)</li> <li>4 = WH (Data)</li> <li>5 = shield</li> </ul> <p>Connectors .../S2501</p>  <ul style="list-style-type: none"> <li>1 = BN (+)</li> <li>2 = WH (Data)</li> <li>3 = BU (GND)</li> <li>4 = BK (Data)</li> <li>5 = shield</li> </ul> <p>Connectors .../S2503</p>  <ul style="list-style-type: none"> <li>1 = RD (+)</li> <li>2 = BU (Data)</li> <li>3 = BK (-)</li> <li>4 = WH (Data)</li> <li>5 = shield</li> </ul>

**LED display**

LED	color	status	description
D		OFF	Error report or diagnostics active.
	RED	ON	Failure of MODBUS 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, diagnostics 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

**Compatible gateways:**

Ident	Type	Communication	Version and higher	Application
6827232	BL67-GW-DPV1	PROFIBUS-DP	FW 1.11	PLC systems with PROFIBUS-DP master. Acyclic services or function modules are not 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. Special services or function modules are not required.
6827214	BL67-GW-EN	Modbus TCP	FW 1.5.0.2	PLC systems with Modbus TCP Master or PC based solution using a Modbus driver software
6827229	BL67-GW-EN-IP	EtherNet/IP™	FW 1.9.0.11	PLC systems with EtherNet/IP™ scanner (master).

**Compatible gateways with integrated DeviceNet™ scanner (master).**

Ident	Type	Communication	Version and higher	Application
6827313	BL67-GW-EN-DN	Modbus TCP slave	FW 1.10.0.4	PLC systems with a Modbus TCP master or a PC based solution using a Modbus driver software. This gateway features an additional integrated DeviceNet™ scanner (master) to built a DeviceNet™ sub-bus.
		DeviceNet™ master		
6827299	BL67-GW-EN-IP-DN	EtherNet/IP™ slave	FW 1.9.0.11	PLC systems with EtherNet/IP™ scanner (master). This gateway features an additional integrated DeviceNet™ scanner (master). to built a DeviceNet™ sub-bus.
		DeviceNet™ master		

**Compatible CoDeSys programmable gateways**

Ident	Type	Communication	Version and higher	Application
6827241	BL67-PG-EN	Modbus TCP	FW 1.5.0.2	PLC systems with Modbus TCP Master or PC based solution using a Modbus driver software
6827246	BL67-PG-EN-IP	EtherNet/IP™	FW 1.9.0.11	PLC systems with EtherNet/IP™ scanner (master).
6827240	BL67-PG-DP	PROFIBUS-DP	FW 1.5.0.2	PLC systems with PROFIBUS-DP master. Acyclic services or function modules are not required.

**I/O Data Mapping**

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