

- **No special software (function module) is necessary for integration in the PLC systems**
- **8 byte user data per read / write cycle**
- **LEDs for display of status and diagnostics**
- **electronics galvanically isolated from the field level via opto couplers**
- **connection of 2 BL Ident write-read heads**
- **transmission rate: 115.2 kbps**
- **cable length: 50 m maximum**

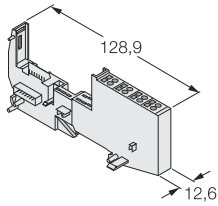
Functional principle

BL ident® solutions can be adapted to different system structures. Numerous fieldbus standards, such as PROFIBUS-DP, EtherNet/IP, Ethernet Modbus TCP, DeviceNet, CANopen and PROFINET IO enable a flexible integration. Simple BL ident® electronic modules (BL20-2RFID-S, BL67-2RFID-S) can be mounted in existing control or host systems, as standard input and output process data are used for communication. Programmable gateways with peripheral pre-processing 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.

Type	BL20-2RFID-S
Ident-No.	6827306
Number of channels	2
Rated voltage from the supply terminal	24 VDC
Rated current from field supply	≤ 100 mA
Rated current from module bus	≤ 30 mA
Power loss, typical	≤ 1 W
Inputs / Outputs	&x0020;
Transmission rate	115.2 kbps
Cable length	50 m
Electrical isolation	isolation of electronics and field level via opto-couplers
Simultaneity factor	1
Sensor supply	0.5 A per channel, short-circuit proof
Number of diagnostic bytes	4
Number of parameter bytes	8
Number of input bytes	24
Number of output bytes	24
Operating temperature	0 to +55 °C
Storage temperature	-25 to +85 °C
Relative humidity	5 to 95% (internal), Level RH-2, no condensation (at 45 °C storage)
Vibration test	acc. to EN 61131
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 50,082-2
Degree of protection	IP20

compatible base modules

Dimension drawing



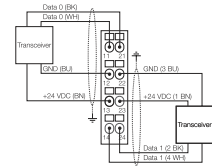
Type

BL20-S4T-SBBS
Ident-No. 6827046
tension spring connection

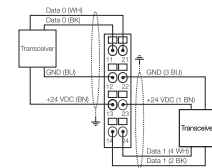
BL20-S4S-SBBS
Ident-No. 6827047
screw connection

Pin configuration

Wiring diagram



Mating Cordset: RK 4.5T-*/S2500



Mating Cordset: RK 4.5T-*/S2501

Compatible gateways

Ident	Type	Communication	Version ... and above	Applications
6827234	BL20-GW-DPV1	PROFIBUS-DP	FW 1.11	PLC systems with PROFIBUS-DP Master. There are no acyclic services or function blocks required.
6827168	BL20-GWBR-DNET	DeviceNet™	FW 6.02	PLC systems with DeviceNet™ Scanner (Master).
6827237	BL20-GW-EN	Modbus TCP	FW 1.5.0.2	PLC systems with Modbus TCP Master or PC based solution using a Modbus driver software.
6827247	BL20-GW-EN-IP	EtherNet/IP™	FW 1.9.0.11	PLC systems with EtherNet/IP™ Scanner (Master).
6827300	BL20-GW-EN-PN	PROFINET IO	FW 1.0.0.8	PLC systems with PROFINET IO Master. There are no acyclic services or function blocks required.

Compatible economy gateways

Ident	Type	Communication	Version ... and above	Applications
6827250	BL20-E-GW-DP	PROFIBUS-DP	FW 1.12	PLC systems with PROFIBUS-DP Master. There are no acyclic services or function blocks required.
6827301	BL20-E-GW-DN	DeviceNet™	FW 1.16	PLC systems with DeviceNet™ Scanner (Master).
6827252	BL20-E-GW-CO	CANopen	FW 2.00	PLC systems with CANopen Master. There are no special CANopen services or function blocks required.

Compatible CoDeSys programmable gateways

Ident	Type	Communication	Version ... and above	Applications
6827249	BL20-PG-EN	Modbus TCP	FW 1.5.0.2	PLC systems with Modbus TCP Master or PC based solution using a Modbus driver software.
6827248	BL20-PG-EN-IP	EtherNet/IP™	FW 1.9.0.11	PLC systems with EtherNet/IP™ Scanner (Master).

I/O Data Mapping

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										