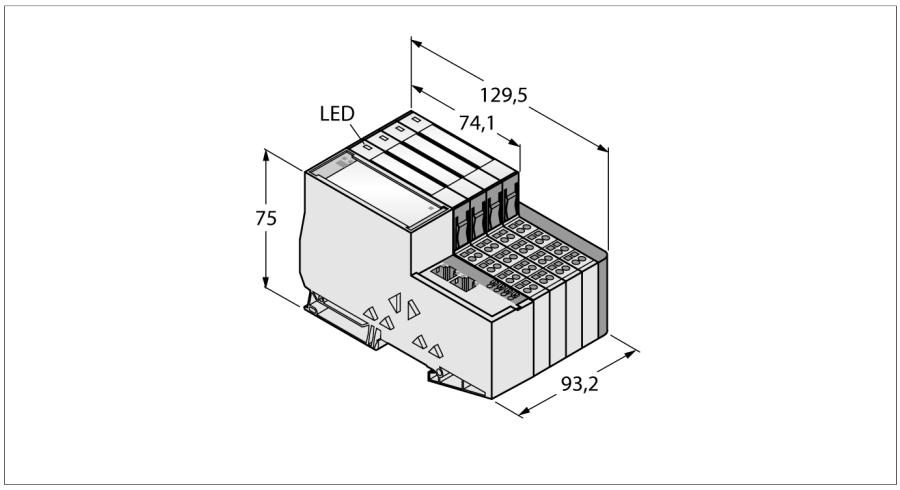
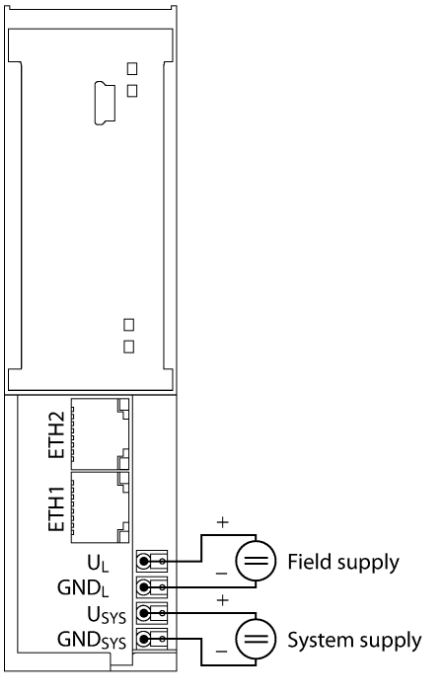
Set for PROFINET IO in IP20
TI-BL20-E-PN-8



- **Connection of up to 8 read/write heads via BLident ® M12 extension cables**
- **Mixed operation of HF and UHF read/write heads**

Field/System supply



Type code	TI-BL20-E-PN-8
Ident no.	7030470
Number of channels	8
Dimensions (W x L x H)	93.2 x 129.5 x 74.4 mm
Rated voltage from the supply terminal	24 VDC
Supply voltage	24 VDC
System power supply	24 VDC / 5 VDC
Field supply	24 VDC
Admissible range	18…30 VDC
Max. field supply current	8
Max. system supply current	0.8
Fieldbus transmission rate	10/100 Mbps, Full/Half Duplex, Auto Negotiation, Auto Crossing
Service interface	Mini USB
Voltage supply connection	Push-in terminals
Transmission rate	115.2 kbps
Cable length	50 m
Electrical isolation	isolation of electronics and field level via optocouplers
Connection technology	screw, tension spring
Sensor supply	0.25 A per channel, short-circuit proof
Number of diagnostics bytes	4
Number of parameter bytes	8
Number of input bytes	4
Number of output bytes	4
Operating temperature	0…+55 °C
Storage temperature	-25…+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
IP Rating	IP20
included in delivery	2 x end brackets BL20-WEW-35/2-SW, 1 x end plate BL20-ABPL

Functional principle

Pin configuration i.e.signal assignment results from the combination with an electronic module. You find the pin configuration and the wiring diagrams on the data sheet of the corresponding electronic module.

The base modules are connected to the field devices via screw connections or tension spring connections.

Note

Further technical data, like for example the temperature range, are determined by the electronic modules and can be found on the data sheets.

BL20 electronic modules are plugged into the purely passive base modules which are used for connection of field devices. Maintenance is significantly facilitated due to separation of the connection level from the module electronics. Furthermore flexibility is enhanced because the base modules provide a choice of tension spring or screw connection technology.

The electronic modules are completely independent of the type of higher level field bus through the use of gateways.

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BL20 gateways are the head component of a BL20 station. They are designed to interface the modular fieldbus nodes to the higher level fieldbus (PROFIBUS-DP, DeviceNet, CANopen, Ethernet).

All BL20 electronic modules communicate over the internal module bus, the data of which is transferred to the fieldbus via the gateway, so that all I/O modules can be configured independently of the bus system.

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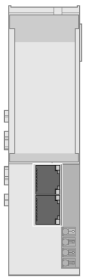
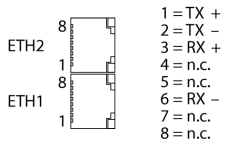
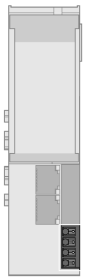
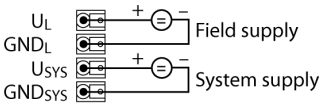
Anschlussübersicht

	PROFINET Fieldbus cable (example): RJ45S-RJ45S-441-2M (ident no. 6932517) or RJ45-FKSDD-441-0,5M/S2174 (ident no. 6914221)	
	Power supply The U_{sys} system supply feeds power to the gateway and the I/O modules. The U_L field supply feeds power to the sensors and actuators.	

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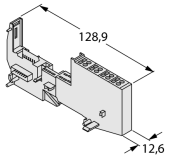
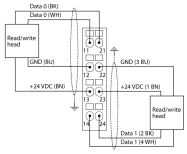
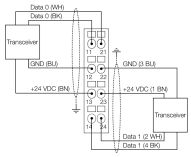
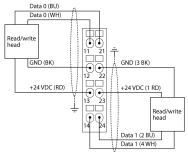
Compatible base modules

Design	Type	Pin configuration
	BL20-S4T-SBBS 6827046 Tension spring connection BL20-S4S-SBBS 6827047 Screw connection	Connectors …/S2500  Connectors …/S2501  Connectors …/S2503 

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Compatible gateways:

Ident	Type	Communication	Version and higher	Application
6827234	BL20-GW-DPV1	PROFIBUS-DP	FW 1.10	PLC systems with Profibus DPV1 master and PIB (Proxi Ident Block) function block. The PIB is required for the control of the RFID system and uses internally acyclic services.
6827300	BL20-GW-EN-PN	PROFINET IO	FW 1.0.0.8	PLC systems with PROFINET IO master and PIB (Proxi Ident Block) function block. The PIB is required for the control of the RFID system and uses internally acyclic services.

Compatible CoDeSys programmable gateways

Ident	Type	Communication	Version and higher	Application
6827250	BL20-E-GW-DP	PROFIBUS-DP	FW 1.10	PLC systems with Profibus DPV1 master and PIB (Proxi Ident Block) function block. The PIB is required for the control of the RFID system and uses internally acyclic services.

Compatible CoDeSys programmable gateways

Ident	Type	Communication	Version and higher	Application
6827249	BL20-PG-EN	Modbus TCP	FW 1.3.0.0	PLC systems with Modbus TCP Master or PC based solution (e.g.visualization) using a Modbus TCP driver software.
6827248	BL20-PG-EN-IP	EtherNet/IP™	FW 1.6.0.1	PLC systems with EtherNet/IP™ scanner (master). A function block is not required for the higher level PLC.

Ident	Type	Communication	Version and higher	Application
-	all PGs	Ethernet TCP/IP	FW 1.3.0.0	PC based applications with transparent Ethernet TCP/IP communication.
-	all PGs	Ethernet UDP/IP	FW 1.3.0.0	PC based applications with transparent Ethernet UDP/IP communication.
-	all PGs	OPC	FW 1.3.0.0	PC based application with OPC client. A license free CoDeSys OPC server is required.
-	all PGs	SymARTI	FW 1.3.0.0	Interchange of global network variables between CoDeSys programmable devices resp. control systems via Ethernet.
-	all PGs	DDE	FW 1.3.0.0	CoDeSys features a DDE (dynamic data exchange) interface. This way contents of control variables and IEC addresses can be exported via the DDE interface and further processed by other applications such as Excel.

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