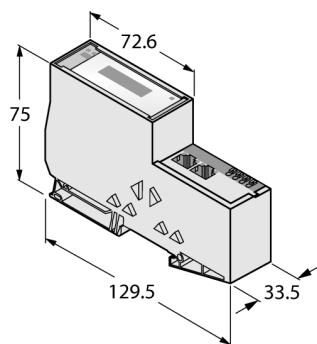


Gateway for the BL20 I/O System

Multiprotocol Interface for Ethernet

With Extended Temperature Range

BL20-E-GW-EN/ET



- DIP switch for adjustment of the node address
- Protection class IP20
- 2 x end brackets BL20-WEW35/2-SW
- 1 x end plate BL20-ABPL
- LEDs for display of supply voltage, group and bus errors
- Multiprotocol gateway between the BL20 system and the Ethernet protocols Modbus TCP, EtherNet/IP™ and PROFINET (from VN 03-00)
- The PROFINET protocol supports fast start-up (FSU)
- The EtherNet/IP™ protocol supports QuickConnect (QC)
- Integrated switch 10/100 Mbps
- Two RJ45 male for fieldbus connection
- Push-in clamps for connection of power supply
- Extended temperature range: -25 °C...+60 °C
- Circuit boards with conformal coating

Type	BL20-E-GW-EN/ET
ID	6827338
Supply voltage	24 VDC
System power supply	24 VDC / 5 VDC
Field supply	24 VDC
Admissible range	18...30 VDC
Nominal current from module bus	≤ 200 mA
Max. field supply current	8 A
Max. system supply current	0.4 A
Voltage supply connection	Push-in terminals
Fieldbus addressing	via DIP switch
System data	
Max. number of I/O modules	31
Transmission rate	10/100 Mbps; full/half duplex; auto negotiation; auto crossing
Connection technology Ethernet	2 x RJ45 female connector
Protocol detection	automatic
Web server	192.168.1.254 (Default)
Service interface	Ethernet
Modbus TCP	
Addressing	Static IP, DHCP
Supported function codes	FC1, FC2, FC3, FC4, FC5, FC6, FC15, FC16, FC23
Number of TCP connections	8
Input register start address	0 (0x0000 hex)
Output register start address	2048 (0x0800 hex)
Ethernet/IP	
Addressing	acc. to EtherNet/IP specification
Quick Connect (QC)	< 500 ms
Device Level Ring (DLR)	supported
Class 1 connections (CIP)	8

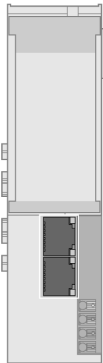
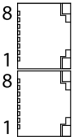
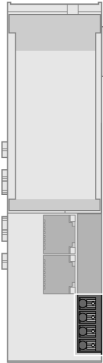
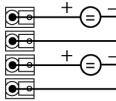
Functional principle

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).

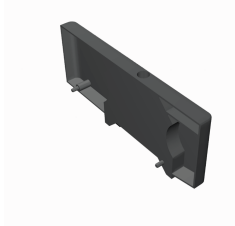
All BL20 electronic modules communicate over the internal module bus, the data of which is transferred to the fieldbus via the gateway, so that all I/O modules can be configured independently of the bus system.

PROFINET	
Addressing	DCP
Conformance class	B (RT)
MinCycleTime	1 ms
Fast Start-Up (FSU)	< 500 ms
Diagnostics	acc. to PROFINET alarm handling
Topology detection	supported
Automatic addressing	supported
Media Redundancy Protocol (MRP)	supported
Dimensions (W x L x H)	33.5 x 129.5 x 74.4 mm
Approvals	CE
Ambient temperature	-25...+60 °C
Storage temperature	-25...+85 °C
Relative humidity	15...95 %, no condensation allowed
Vibration test	Acc. to EN 61131
Shock test	Acc. to IEC 60068-2-27
Drop and topple	Acc. to IEC 60068-2-31
Electromagnetic compatibility	Acc. to EN 61131-2
Protection class	IP20
MTTF	328 years acc. to SN 29500 (Ed. 99) 20 °C
Included in delivery	2 x end brackets BL20-WEW-35/2-SW, 1 x end plate BL20-ABPL

Anschlussübersicht

	Ethernet Fieldbus cable (example): RJ45S-RJ45S-441-2M (ID number 6932517) or RJ45-FKSDD-441-0,5M/S2174 (ID number 6914221)	Pin Assignment ETH2 8 1 8 1 ETH1  1 = TX + 2 = TX - 3 = RX + 4 = n.c. 5 = n.c. 6 = RX - 7 = n.c. 8 = n.c.
	Power Supply The U_{SYS} system supply feeds the gateway and the I/O modules. The U_L field supply feeds the sensors and actuators.	Pin Assignment U_L GND_L U_{SYS} GND_{SYS}  Field supply System supply

Accessories

Type code	Ident no.		Dimension drawing
BL20-ABPL (2 PCS.)	6827123	End plate for a BL20 station after the last I/O module (2 pieces)	
BL20-WEW-35/2-SW (10 PCS.)	6827124	End bracket for fixation of a BL20 station (10 pieces)	