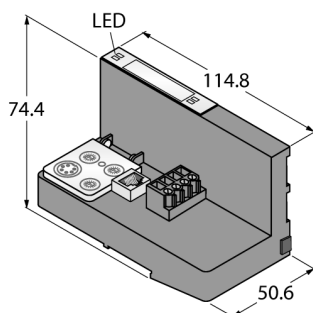


CODESYS 2 Programmable Gateway for the BL20 I/O System

Interface for Modbus TCP

BL20-PG-EN



- CODESYS programmable acc.to IEC 61131-3
- Ethernet and RS232 programming interface
- 512 kB program memory
- 32 bit RISC processor
- < 1 ms for 1000 commands
- 3 decimal rotary coding switches
- Protection class IP20
- Integrated power supply
- LEDs for display of supply voltage, group and bus errors
- Gateway between the BL20 system and MODBUS TCP
- 10/100 Mbps

Type	BL20-PG-EN
ID	6827249
Supply voltage	24 VDC
System power supply	24 VDC / 5 VDC
Admissible range	18...30 VDC
Nominal current from module bus	≤ 500 mA
Max. field supply current	10 A
Max. system supply current	1.2 A
Voltage supply connection	Screw terminals
Fieldbus addressing	Rotary switch, BOOTP, DHCP, IO-ASSISTANT
Fieldbus connection technology	RJ45 port
PLC data	
Programming	CODESYS 2
Released for CODESYS version	V 2.3.9.35
Programming languages	IEC 61131-3 (IL, LD, FBD, SFC, ST)
Application tasks	1
Number of POU's	1024
Programming interface	RS232 interface, Ethernet
Processor	RISC, 32 Bit
Cycle time	< 1 ms for 1000 IL commands (without I/O cycle)
Program memory	512 kByte
Data memory	512 kByte
Input data	4 kByte
Output data	4 kByte
Non-volatile memory	16 kByte
Max. number of I/O modules	74
Transmission rate	10/100 Mbps; full/half duplex; auto negotiation; auto crossing
Web server	192.168.1.254 (Default)
Service interface	PS/2 socket

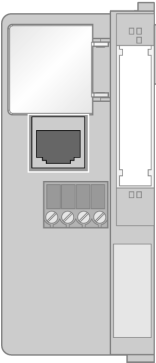
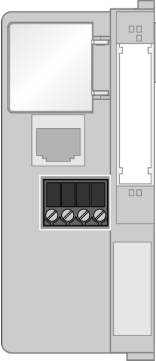
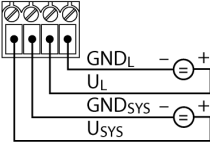
Functional principle

The programmable BL20 gateways can be used as an autonomous PLC or as a decentral PLC in a network interconnection for fast signal preprocessing.

BL20 gateways are the head component of a BL20 station. The BL20 extension modules communicate over the internal module bus with the gateway and can be configured independently of the fieldbus protocol.

Dimensions (W x L x H)	50.6 x 114.8 x 74.4 mm
Approvals	CE, cULus, zone 2, Class I, Div. 2
Ambient temperature	0...+55 °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 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	Acc. to EN 50082-2
Protection class	IP20
MTTF	201 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

	Modbus TCP Fieldbus cable (example): RJ45S-RJ45S-441-2M (ident no. 6932517) or RJ45-FKSDD-441-0,5M/S2174 (ident no. 6914221)	 12345678 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 power to the gateway and the I/O modules. The U_L field supply feeds power to the sensors and actuators.	 GND_L - + U_L - + GND_{sys} - + U_{sys} - + Field supply System supply