

14.4 CS1030

14.4.1 General information

In addition to the standard I/O devices, complex devices often need to be connected. The X20 CS communication modules are intended precisely for cases like this. As normal X20 electronics modules, they can be placed anywhere on the remote backplane.

- RS485/RS422 interface for serial, remote connection of complex devices to the X20 System
- Integrated terminating resistor

14.4.2 Order data

Model number	Short description	Figure
	Interface module	
X20CS1030	X20 interface module, 1x RS485/RS422, max. 250 kBit/s	
	Required accessories	
X20TB06	X20 terminal block, 6-pin, 24 V coded	
X20TB12	X20 terminal block, 12-pin, 24 V coded	
X20BM11	X20 bus module, 24 V coded, internal I/O supply is interconnected	

Table 269: CS1030 - Order data

14.4.3 Technical data

Product ID	CS1030
Short description	
Communication module	1x RS485/RS422
Interfaces	
Interface IF1 Type Design Maximum transfer rate	RS485/RS422 Contact via 12-pin terminal block TB12 250 kBit/s
General information	
Status indicators	Data transfer, terminating resistor, operating status, module status
Diagnostics Module run/error Data transfer Terminating resistor	Yes, with status LED and software status Yes, with status LED Yes, with status LED
Electrical isolation IF1 - Bus IF1 - I/O supply	Yes Yes
Power consumption Bus I/O internal	0.01 W 1.44 W
Certification	CE, C-UL-US, GOST-R
Operating conditions	
Operating temperature Horizontal installation Vertical installation	0°C to +55°C 0°C to +50°C
Relative humidity	5 to 95%, non-condensing
Mounting orientation	Horizontal or vertical
Installation at altitudes above sea level 0 - 2000 m >2000 m	No derating Reduction of ambient temperature by 0.5°C per 100 m
Protection type	IP20
Storage and transport conditions	
Temperature	-25°C to +70°C
Relative humidity	5 to 95%, non-condensing
Mechanical characteristics	
Spacing	12.5 ^{+0.2} mm
Comment	Order terminal block 1x X20TB06 or X20TB12 separately Order bus module 1x X20BM11 separately

Table 270: CS1030 - Technical data

14.4.4 Additional technical data

Product ID	CS1030
Interface IF1, RS485/RS422	
FIFO	Software (1 KByte)
Maximum distance	1200 m
Network-capable	Yes
Terminating resistor	Integrated in the module
General information	
B&R ID code	\$1FD0

Table 271: CS1030 - Additional technical data

14.4.5 Status LEDs

Figure	LED	Color	Status	Description
	r	Green	Off	Module supply not connected
			Single flash	Reset mode
			Blinking	Preoperational mode
			On	RUN mode
	e	Red	Off	Module supply not connected or everything is OK
			On	Error or reset state
	e + r	Steady red / single green flash		Invalid firmware
	Tx	Yellow	On	The module is sending data via the RS485/RS422 interface
	Rx	Yellow	On	The module is receiving data via the RS485/RS422 interface
	T	Yellow	On	The terminating resistor integrated in the module is turned on

Table 272: CS1030 - Status indicators

14.4.6 Pin assignments

RS485 mode

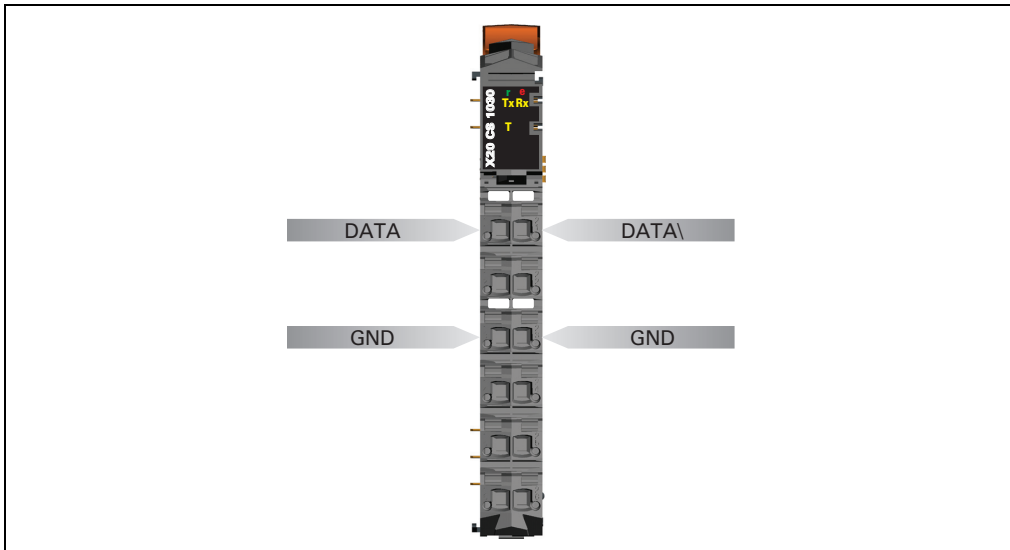


Figure 191: CS1030 - Pin assignments (in RS485 mode)

RS422 mode

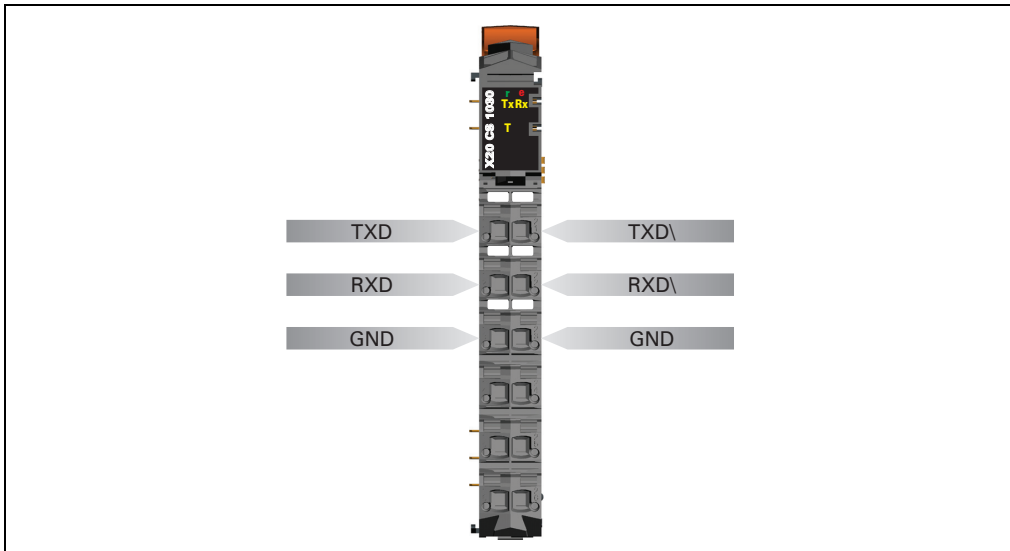


Figure 192: CS1030 - Pin assignments (in RS422 mode)

14.4.7 Terminating resistor

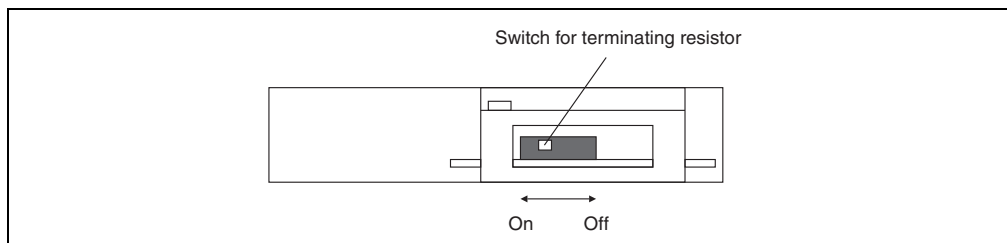


Figure 193: CS1030 - Terminating resistors

A terminating resistor is integrated in the CS1030 communication module. It is turned on and off with a switch on the bottom of the housing. An active terminating resistor is indicated by the T LED.