

SIMATIC S7-200 Communication

EM 277 PROFIBUS-DP module

Overview



- For connection of the S7-22x to PROFIBUS-DP (as slave) and MPI
- Can be simultaneously operated as MPI slave and DP slave
- Transmission rate max. 12 Mbit/s
- Can be used with CPU from version 6ES7 22x-xxx21-xxxx

Technical specifications

Suitable for connection to	CPU 22x
• Plug-in I/O terminals	No
• Number of outputs	1
Type	RS 485
Isolation	
• Between external signal and control circuits	500 V AC (electrical)
Signal and diagnostic displays (LEDs)	<ul style="list-style-type: none"> • CPU fault • Power supply • DP fault • DX mode
Power supply using communications port	
• 5 V DC	
- output current	90 mA
- isolation between output and module and between output and 24 V DC power supply	500 V AC (max. 1 min.)
• 24 V DC	
- voltage range	20.4 to 28.8 V
- output current	120 mA
- overcurrent protection	0.7 to 2.4 A
- isolation	No; same circuit as for 24 V DC power supply
Protocols	<ul style="list-style-type: none"> • PROFIBUS DP (slave) • MPI (slave)

Current consumption	
• Over backplane bus (5 V DC)	150 mA
• External supply using sensor power supply (24 V DC)	30 to 180 mA
Power loss	2.5 W
Dimensions (W x H x D) in mm	71 x 80 x 62
Weight	175 g
Communication	
PROFIBUS DP transmission rates (self-setting)	9.6/19.2/45.45/93.75/187.5/500/1000/1500/3000/6000/ 12000 kbit/s
Cable lengths	100 to 1200 m, depending on transmission rate
DP station address	0 to 99, programmable
Number of stations per segment, max.	32
Number of stations in the network, max.	126, max. 99 of which EM 277
MPI connections, max.	6; 1 each reserved for programming device and OP
Connectable nodes	<ul style="list-style-type: none"> • TD 200 Version 2.0 or higher • OP • TP • Programming device/PC • S7-300/-400 • PROFIBUS DP master

Ordering data

EM 277 PROFIBUS DP input module

for CPU 222/224/226/226 XM, for connection to PROFIBUS DP (slave) and MPI

Order No.

6ES7 277-0AA22-0XA0

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