SIEMENS

Data sheet 6ES7277-0AA22-0XA0

	*** spare part *** SIMATIC S7-200, PROFIBUS DP Slave module, 9.6 KB to 12 MB, 1 interface PROFIBUS-DP/MPI
Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	20.4 V
● permissible range, upper limit (DC)	28.8 V
Input current	
from external supply (24 V DC), max.	180 mA; 30 to 180 mA
from backplane bus 5 V DC, max.	150 mA
Output voltage	
Rated value (DC)	
● 5 V DC	Yes
● 24 V DC	Yes; 20.4 to 28.8V
Output current	
For interface (5 V DC), max.	90 mA
For interface (24 V DC), max.	120 mA
● Current limitation	0.7 to 2.4 A
Power loss	
Power loss, typ.	2.5 W
Hardware configuration	
connectable nodes	TD 200 as of V2.0, OP, TP, PG/PC, S7-300/400, PROFIBUS DP master
Interfaces	
Number of RS 485 interfaces	1
MPI	
● Number of connections, max.	6
Interface types	
RS 485	
● Transmission rate, max.	12 Mbit/s; 9,6 / 19,2 / 45,45 / 93,75 / 187,5 / 500 kbit/s; 1 / 1,5 / 3 / 6 / 12 Mbit/s
● automatic detection of transmission rate	Yes
● Cable length, max.	1 200 m; 100 to 1200 m, depending on transmission speed
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP (slave), MPI (slave)
PROFIBUS DP	
● Number of node addresses, max.	0 to 99, adjustable
● Number of stations per segment, max.	32
● Number of stations in network, max.	126; of which max. 99 EM 277
Communication functions	
Number of connections	
● usable for PG communication	
— reserved for PG communication	1
● usable for OP communication	
— reserved for OP communication	1
Interrupts/diagnostics/status information	
Diagnostics indication LED	
● Monitoring of the supply voltage (PWR-LED)	Yes
● Bus fault BF (red)	Yes
● CPU error (red)	Yes
● DX mode (red)	Yes
Isolation	
Isolation tested with	between external signal and control logic: 500 V AC (galvanic); 5 V DC

Subject to change without notice
© Copyright Siemens

	interface: Isolation between output and module as well as 24 V DC supply voltage: 500 V AC (max. 1 min.); 24 V DC interface: Isolation no; same circuit as 24 V DC supply voltage
Connection method	
Plug-in I/O terminals	No
Dimensions	
Width	71.2 mm
Height	80 mm
Depth	62 mm
Weights	
Weight, approx.	175 g
Approvals / Certificates	

General Product Approval			For use in hazardous locations		Maritime application
Miscellaneous	CE EG-Konf.	China RoHS	Ex ATEX	FM	GL GL

last modified: 9/25/2025

© Copyright Siemens