SIEMENS

Data sheet 6ES7157-1AA00-0AB0



SIMATIC ET 200AL, PROFIBUS interface module IM 157-1 DP, Degree of protection IP67

General information	
Product type designation	IM 157-1 DP
HW functional status	FS02
Firmware version	V1.0.x
Vendor identification (VendorID)	81A9H
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	STEP 7 V13 SP1 or higher
● STEP 7 configurable/integrated from version	From V5.5 SP4 Hotfix 3
● PROFIBUS from GSD version/GSD revision	GSD as of Revision 5
Configuration control	
via dataset	Yes
Supply voltage	
power supply according to NEC Class 2 required	No
Load voltage 1L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	20.4 V
● permissible range, upper limit (DC)	28.8 V
● Reverse polarity protection	Yes; against destruction
Input current	
Current consumption (rated value)	50 mA
from load voltage 1L+ (unswitched voltage)	4 A; Maximum value
from load voltage 2L+, max.	4 A; Maximum value
Power loss	
Power loss, typ.	1.7 W
Address area	
Address space per station	
● Address space per station, max.	244 byte
Interfaces	
Number of PROFIBUS interfaces	1
1. Interface	
Interface type	PROFIBUS DP
Interface types	
● RS 485	Yes
● M12 port	Yes; 2x M12 B-coded
Protocols	
● PROFIBUS DP slave	Yes
Interface types	
RS 485	

Subject to change without notice
© Copyright Siemens

● Transmission rate, max.	12 Mbit/s
Protocols	
PROFIBUS DP	
Services	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes
— DPV0	Yes
— DPV1	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
● Diagnostic alarm	Yes
Diagnostics indication LED	
● RUN LED	Yes; green LED
● ERROR LED	Yes; red LED
● MAINT LED	Yes; Yellow LED
● Connection display DP	Yes; green LED
Potential separation	
between the load voltages	Yes
between PROFIBUS DP and all other circuit components	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Degree and class of protection	
IP degree of protection	IP65/67
Standards, approvals, certificates	
Suitable for safety-related tripping of standard modules	Yes; From FS01
Highest safety class achievable for safety-related tripping of standard modules	
● Performance level according to ISO 13849-1	PL d
● Category according to ISO 13849-1	Cat. 3
● SIL acc. to IEC 62061	SIL 2
● remark on safety-oriented shutdown	https://support.industry.siemens.com/cs/de/en/view/39198632
Ambient conditions	
Ambient temperature during operation	
● min.	-30 °C
● max.	55 °C
connection method	
Design of electrical connection for supply voltage	M8, 4-pole
ET-Connection	
● ET-Connection	M8, 4-pin, shielded
Dimensions	
Width	45 mm
Height	159 mm
Depth	46 mm
Weights	
Weight, approx.	211 g

last modified: 8/16/2023

Subject to change without notice
© Copyright Siemens