



SIMATIC ET 200MP. PROFIBUS connection IM 155-5 DP ST for max. 12 S7-1500 modules Including PROFIBUS connection plug (6ES7972-0BB70-0XA0)

General information	
Product type designation	IM 155-5 DP ST
HW functional status	From FS01
Firmware version	V2.0.0
• FW update possible	Yes
Vendor identification (VendorID)	81AAh
Product function	
• I&M data	Yes; I&M0 to I&M3
• Module swapping during operation (hot swapping)	No
• Isochronous mode	No
• Tool changer	No
• Local coupling, IO data	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V13
• STEP 7 configurable/integrated from version	use GSD file
• PROFIBUS from GSD version/GSD revision	V1.0 / V5.1
Configuration control	
via dataset	No
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Short-circuit protection	Yes
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption (rated value)	0.2 A; at 24 V DC and without load
Current consumption, max.	1.2 A; at 20.4 V DC and max. load
Inrush current, max.	4 A
$I^2t$	0.09 A <sup>2</sup> ·s
from interface 5 V DC, max.	80 mA
Power	
Infeed power to the backplane bus	14 W
Power loss	
Power loss, typ.	4 W
Address area	
Address space per module	
• Address space per module, max.	64 byte; For input and output data respectively
Address space per station	

• Address space per station, max.	244 byte; For input and output data respectively
<b>Hardware configuration</b>	
Integrated power supply	Yes; 14 W
System power supply can be plugged in to left of IM	No
Number of permissible power segments	1; incl. interface module
<b>Rack</b>	
• Modules per rack, max.	12; I/O modules
<b>Interfaces</b>	
Number of PROFIBUS interfaces	1; 1 port
<b>1. Interface</b>	
<b>Interface types</b>	
• RS 485	Yes
• Number of ports	1
• integrated switch	No
• BusAdapter (PROFINET)	No
<b>Protocols</b>	
• PROFIBUS DP device	Yes
<b>Interface types</b>	
<b>RS 485</b>	
• Transmission rate, max.	12 Mbit/s
<b>Protocols</b>	
Modbus TCP	No
<b>PROFIBUS DP</b>	
<b>Services</b>	
— SYNC capability	Yes
— FREEZE capability	Yes
— DPV1	Yes
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
<b>Diagnostics indication LED</b>	
• RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
• MAINT LED	Yes; Yellow LED
• Connection display DP	Yes; green LED
<b>Potential separation</b>	
between backplane bus and electronics	No
between PROFIBUS DP and all other circuit components	Yes
between supply and all other circuits	No
<b>Permissible potential difference</b>	
between different circuits	Safety extra low voltage SELV
<b>Isolation</b>	
Isolation tested with	707 V DC (type test)
<b>Standards, approvals, certificates</b>	
<b>Ecological footprint</b>	
• environmental product declaration	Yes
<b>Global warming potential</b>	
— global warming potential, (total) [CO2 eq]	64.1 kg
— global warming potential, (during production) [CO2 eq]	11.1 kg
— global warming potential, (during operation) [CO2 eq]	53.6 kg
— global warming potential, (after end of life cycle) [CO2 eq]	-0.669 kg
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• horizontal installation, min.	-25 °C; from FS04
• horizontal installation, max.	60 °C
• vertical installation, min.	-25 °C; from FS04
• vertical installation, max.	40 °C

Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
connection method	
ET-Connection	
• via BU/BA Send	No
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	360 g
last modified:	
10/9/2024 	