



Figure similar

SIMATIC ET 200MP. PROFINET IO-DEVICE INTERFACEMODULE IM 155-5 PN ST FOR ET 200MP ELEKTRONIKMODULES; UP TO 12 IO-MODULES WITHOUT ADDITIONAL PS; UP TO 30 IO- MODULES WITH ADDITIONONAL PS SHARED DEVICE; MRP; IRT >=0.25MS; ISOCHRONICITY FW-UPDATE; I&M0...3; FSU WITH 500MS

General information	
Product type designation	IM 155-5 PN ST
HW functional status	from FS01
Firmware version	V4.1.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0X0312
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> <li>Module swapping during operation (hot swapping)</li> <li>Isochronous mode</li> <li>IRT</li> <li>Tool changer</li> <li>Local coupling, IO data</li> </ul>	Yes; I&M0 to I&M3 No Yes Yes No No
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> <li>STEP 7 configurable/integrated from version</li> <li>PROFINET from GSD version/GSD revision</li> </ul>	V15 use GSD file GSDML V2.3
Configuration control	
via dataset	Yes
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	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	10 ms
Input current	
Current consumption (rated value)	0.2 A; at 24 V DC and without load
Current consumption, max.	1.2 A
Inrush current, max.	9 A
I <sup>2</sup> t	0.09 A <sup>2</sup> ·s
Power	
Infeed power to the backplane bus	14 W
Power consumption from the backplane bus	2.3 W; in case of operation with separate system power supply to the left of IM
Power loss	
Power loss, typ.	4.5 W

Address area	
Address space per module	
• Address space per module, max.	256 byte; For input and output data respectively
Address space per station	
• Address space per station, max.	512 byte; For input and output data respectively
Hardware configuration	
Integrated power supply	Yes; 14 W
System power supply can be plugged in to left of IM	Yes
Number of permissible power segments	3; incl. interface module
Rack	
• Modules per rack, max.	30; I/O modules
Submodules	
• Number of submodules per station, max.	256; 9 per I/O module
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes
• Number of ports	2
• integrated switch	Yes
• BusAdapter (PROFINET)	No
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	Yes; 250 µs to 4 ms in 125 µs frame
— PROFIenergy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Interface types	
RJ 45 (Ethernet)	
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
• Autonegotiation	Yes
• Autocrossing	Yes
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	Yes
PROFIBUS	No
EtherNet/IP	No
Modbus TCP	No
Redundancy mode	
• PROFINET system redundancy (S2)	No
— on S7-1500R/H	No
— on S7-400H	No
• PROFINET system redundancy (R1)	No
• H-Sync forwarding	No
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	

Equidistance	Yes	
shortest clock pulse	250 µs	
max. cycle	4 ms	
Bus cycle time (TDP), min.	250 µs	
Jitter, max.	1 µs	
<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 LINK TX/RX	Yes; 2x green-yellow LEDs	
<b>Potential separation</b>		
between backplane bus and electronics	No	
between PROFINET and all other circuits	Yes; 1500 V AC (type test)	
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>		
Siemens Eco Profile (SEP)	Siemens EcoTech	
<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 FS03	
• horizontal installation, max.	60 °C	
• vertical installation, min.	-25 °C; From FS03	
• vertical installation, max.	40 °C	
<b>Altitude during operation relating to sea level</b>		
• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual	
<b>Absolute humidity</b>		
• dew point, min.	-60 °C; suitable for dry room applications	
<b>Connection method</b>		
<b>ET-Connection</b>		
• via BU/BA Send	No	
<b>Dimensions</b>		
Width	35 mm	
Height	147 mm	
Depth	129 mm	
<b>Classifications</b>		
	<b>Version</b>	<b>Classification</b>
eClass	14	27-24-26-08
eClass	12	27-24-26-08
eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08

eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	10	EC001604
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

**Approvals / Certificates**

**General Product Approval**



[Confirmation](#)



[Miscellaneous](#)

**General Product Approval**

**EMV**

**Test Certificates**



[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)

**Maritime application**

**other**



[Confirmation](#)



[Miscellaneous](#)

**Environment**

[Environmental Confirmations](#)



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