



SIMATIC ET 200MP PROFINET IO device Interface module IM 155-5 PN BA for ET 200MP electronic modules; up to 12 IO modules; Integrated 2-port switch; RJ45 Shared Device with 2 IO controllers, MRP; FW update; I&M0...3

General information	
Product type designation	IM 155-5 PN BA
HW functional status	From FS02
Firmware version	V4.3.0
Device identifier (DeviceID)	0X0312
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> <li>Module swapping during operation (hot swapping)</li> </ul>	No
<ul style="list-style-type: none"> <li>Isochronous mode</li> </ul>	No
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V15.1 with HSP 187
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 / -
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3 / -
Configuration control	
via user data	No
via dataset	No
Supply voltage	
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
Short-circuit protection	Yes
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms
Input current	
Current consumption (rated value)	1 A
Current consumption, max.	1.7 A
Inrush current, max.	2.8 A
$I^2t$	0.04 A <sup>2</sup> ·s
Power	
Infeed power to the backplane bus	14 W
Power loss	
Power loss, typ.	3 W
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>Address space per module, max.</li> </ul>	64 byte; per input / output

Address space per station	
• Address space per station, max.	64 byte; per input / output
<b>Hardware configuration</b>	
Integrated power supply	Yes
System power supply can be plugged in to left of IM	No
Number of permissible power segments	1
<b>Rack</b>	
• Modules per rack, max.	12; I/O modules
<b>Submodules</b>	
• Number of submodules per station, max.	108; 9 submodules / I/O modules
<b>Interfaces</b>	
Number of PROFINET interfaces	1; 2 ports (switch) RJ45
<b>1. Interface</b>	
<b>Interface types</b>	
• RJ 45 (Ethernet)	Yes
• Number of ports	2
• integrated switch	Yes
• BusAdapter (PROFINET)	No
<b>Protocols</b>	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes
<b>Interface types</b>	
<b>RJ 45 (Ethernet)</b>	
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
• Autonegotiation	Yes
• Autocrossing	Yes
<b>Protocols</b>	
<b>PROFINET IO Device</b>	
<b>Services</b>	
— IRT	No
— PROFIenergy	No
— Prioritized startup	No
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
<b>Redundancy mode</b>	
• PROFINET system redundancy (S2)	No
<b>Media redundancy</b>	
— MRP	Yes
— MRPD	No
<b>Open IE communication</b>	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
<b>Isochronous mode</b>	
Equidistance	No
<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

Potential separation	
between backplane bus and electronics	No
between PROFINET and all other circuits	Yes
between supply and all other circuits	No
Permissible potential difference	
between different circuits	Safety extra low voltage SELV
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• horizontal installation, min.</li> <li>• horizontal installation, max.</li> <li>• vertical installation, min.</li> <li>• vertical installation, max.</li> </ul>	<ul style="list-style-type: none"> <li>-30 °C; From FS03</li> <li>60 °C</li> <li>-30 °C; From FS03</li> <li>40 °C</li> </ul>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	236 g
<b>last modified:</b>	1/19/2021 