## **SIEMENS**

## **Data sheet**



SIMATIC ET 200MP. PROFINET IO device Interface module IM 155-5 PN HF, for ET 200MP electronic modules; Up to 12 IO modules without PS; Up to 30 IO modules with additional PS; Integrated 2-port switch; RJ45 shared device; MRP; IRT >=0.25 ms; Isochronous mode FW update; I&M0...3; Prioritized startup, S2 redundancy; Shared device with 4 controllers Suitable for operation with active backplane bus (FW V4.4 or higher)

General information		
Product type designation	IM 155-5 PN HF	
HW functional status	From FS03	
Firmware version	V4.4	
FW update possible	Yes	
Vendor identification (VendorID)	002AH	
Device identifier (DeviceID)	0X0312	
Product function		
<ul> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3	
<ul> <li>Module swapping during operation (hot swapping)</li> </ul>	Yes; In combination with active backplane bus	
Isochronous mode	Yes	
Engineering with		
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V16 with HSP 308	
<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 / -	
<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3 / -	
Configuration control		
via user data	No	
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> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms	
Input current		
Current consumption (rated value)	0.2 A	
Current consumption, max.	1.2 A	
Inrush current, max.	9 A	
l²t	0.09 A²-s	
Power		
Infeed power to the backplane bus	14 W	
Power available from the backplane bus	2.3 W	
Power loss		
Power loss, typ.	4.5 W	
Address area		
Address space per module		

Address space per module, max.	256 byte; per input / output
Address space per module, max.  Address space per station	200 byte, per iliput / output
Address space per station, max.	512 byte; per input / output
Hardware configuration	512 byte, per impat/ output
Integrated power supply	Yes
System power supply can be plugged in to left of IM	Yes; only with design with U-connectors
Number of permissible power segments	3
Rack	3
Modules per rack, max.	30; I/O modules
Submodules	oo, iro modules
Number of submodules per station, max.	256
Interfaces	
Number of PROFINET interfaces	1
1. Interface	_
Interface types	
RJ 45 (Ethernet)	Yes
Number of ports	2
• integrated switch	Yes
Protocols	
PROFINET IO Device	Yes
Open IE communication	Yes
Media redundancy	Yes
Interface types	
RJ 45 (Ethernet)	
Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
Autonegotiation	Yes
Autocrossing	Yes
Protocols	
PROFINET IO Device	
Services	
— IRT	Yes
— PROFlenergy	No
Prioritized startup	Yes
— Shared device	Yes
Number of IO Controllers with shared device,	4
max.	·
Redundancy mode	
<ul> <li>PROFINET system redundancy (S2)</li> </ul>	Yes
— on S7-1500R/H	Yes
— on S7-400H	Yes; With GSDML file as of STEP 7 V5.5 SP3
<ul> <li>Redundant PROFINET configuration (R1)</li> </ul>	No
H-Sync forwarding	Yes
Media redundancy	
— MRP	Yes
— MRPD	Yes
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	
Equidistance	Yes
shortest clock pulse	250 μs
max. cycle	4 ms
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	



• RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
MAINT LED	Yes; Yellow LED
<ul> <li>Connection display LINK TX/RX</li> </ul>	Yes; 2x green-yellow LEDs
Potential separation	
between backplane bus and electronics	No
between PROFINET and all other circuits	Yes; 1 500 V AC
between supply and all other circuits	No
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
<ul> <li>horizontal installation, min.</li> </ul>	-25 °C; from FS04
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
<ul> <li>vertical installation, min.</li> </ul>	-25 °C; from FS04
vertical installation, max.	40 °C
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
connection method / header	
ET-Connection	
<ul> <li>via BU/BA Send</li> </ul>	No
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	350 g

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