

SIMATIC DP, Connection ET 200M IM 153-4 PN IO High Feature for max. 12 S7-300 modules, supports fail-safe module, HART modules, shared device, Medium Redundancy Protocol



General information	
Product type designation	IM 153-4 PN HF
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0302H
Supply voltage	
Rated value (DC)	24 V
<ul style="list-style-type: none"> <li>• 24 V DC</li> </ul>	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
external protection for power supply lines (recommendation)	In a construction with grounded reference potential, a fuse is necessary for redundant interface modules (Recommendation: 2.5 A)
Mains buffering	
<ul style="list-style-type: none"> <li>• Mains/voltage failure stored energy time</li> </ul>	5 ms
Input current	
Current consumption, max.	600 mA; with 24 V DC supply
Inrush current, typ.	4 A
I <sup>2</sup> t	0.09 A <sup>2</sup> ·s

<b>Output voltage</b>	
Rated value (DC)	5 V
<b>Output current</b>	
for backplane bus (5 V DC), max.	1.5 A
<b>Power loss</b>	
Power loss, typ.	6 W
<b>Address area</b>	
Addressing volume	
• Inputs	672 byte; Extended HART user data
• Outputs	192 byte
<b>Hardware configuration</b>	
Number of modules per DP slave interface, max.	12
<b>Protocols</b>	
Bus protocol/transmission protocol	PROFINET IO
Protocols (Ethernet)	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
• ping	Yes
• ARP	Yes
PROFINET IO Device	
Services	
— Isochronous mode	Yes
— IRT	Yes
— PROFINergy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Redundancy mode	
• MRP	Yes
• PROFINET system redundancy (S2)	Yes
<b>Interrupts/diagnostics/status information</b>	
Diagnostics indication LED	
• for module diagnostics	Yes
• Connection to network LINK (green)	Yes
• Transmit/receive RX/TX (yellow)	Yes
<b>Potential separation</b>	
Potential separation exists	Yes; Only direction PROFINET, RWB is not separated

Isolation	
Isolation tested with	Between PROFINET and 24 V supply: 1 500 V AC, between functional grounding and 24 V supply: 500 V DC
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m
Dimensions	
Width	40 mm
Height	125 mm
Depth	118 mm
Weights	
Weight, approx.	215 g
<b>last modified:</b>	01/22/2020