

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
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	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	600 mA; with 24 V DC supply
Inrush current, typ.	4 A
$I^2t$	0.09 A <sup>2</sup> ·s
Output voltage	

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>	
<b>Addressing volume</b>	
<ul style="list-style-type: none"> <li>• Inputs</li> <li>• Outputs</li> </ul>	672 byte; Extended HART user data 192 byte
<b>Hardware configuration</b>	
Number of modules per DP slave interface, max.	12
<b>Protocols</b>	
Bus protocol/transmission protocol	PROFINET IO
<b>Protocols (Ethernet)</b>	
<ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• SNMP</li> <li>• LLDP</li> <li>• ping</li> <li>• ARP</li> </ul>	Yes Yes Yes Yes Yes
<b>PROFINET IO Device</b>	
<b>Services</b>	
<ul style="list-style-type: none"> <li>— IRT</li> <li>— PROFINET energy</li> <li>— Prioritized startup</li> <li>— Shared device</li> <li>— Number of IO Controllers with shared device, max.</li> </ul>	Yes No Yes Yes 2
<b>Redundancy mode</b>	
<ul style="list-style-type: none"> <li>• PROFINET system redundancy (S2)</li> </ul>	Yes
<b>Media redundancy</b>	
<ul style="list-style-type: none"> <li>— MRP</li> </ul>	Yes
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• LINK LED</li> <li>• RX/TX LED</li> <li>• for module diagnostics</li> </ul>	Yes; green LED Yes; Yellow LED Yes
<b>Potential separation</b>	
Potential separation exists	Yes; Only direction PROFINET, RWB is not separated
<b>Isolation</b>	

Isolation tested with	Between PROFINET and 24 V supply: 1 500 V AC, between functional grounding and 24 V supply: 500 V DC
<b>Degree and class of protection</b>	
IP degree of protection	IP20
<b>Ambient conditions</b>	
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
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	118 mm
<b>Weights</b>	
Weight, approx.	215 g
<b>last modified:</b>	12/09/2020