



SIMATIC DP, Connection ET 200M IM 153-2 High Feature for max. 12 S7-300 modules with redundancy capability, Timestamping suitable for isochronous mode New features: up to 12 modules can be used Slave INITIATIVE for Drive ES and Switch ES Expanded quantity structure for HART auxiliary variables Operation of the 64-channel modules 32 signals/slot +++Observe compatibility notes in manual+++

General information	
Product type designation	IM 153-2 DP HF
Firmware version	V6.0.0
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Mains buffering	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms
Input current	
Current consumption, max.	650 mA; with 24 V DC supply
Inrush current, typ.	3 A
$I^2t$	0.1 A <sup>2</sup> ·s
Output current	
for backplane bus (5 V DC), max.	1.5 A
Power loss	
Power loss, typ.	5.5 W
Address area	
Addressing volume	
<ul style="list-style-type: none"> <li>Inputs</li> <li>Outputs</li> </ul>	244 byte 244 byte
Hardware configuration	
Number of modules per DP slave interface, max.	12
Time stamping	
Accuracy	1 ms; 1 ms at up to 8 modules; 10 ms at up to 12 modules
Number of message buffers	15
Messages per message buffer	20
Number of stampable digital inputs, max.	128; Max. 128 signals/station; max. 32 signals/slot
Time format	RFC 1119
Time resolution	0.466 ns
Time interval for transmitting the message buffer if a message is present	1 000 ms
Time stamp on signal change	rising / falling edge as signal entering or exiting
Interfaces	
Transmission rate, max.	12 Mbit/s
1. Interface	
automatic detection of transmission rate	Yes

<b>Interface types</b>	
<ul style="list-style-type: none"> <li>• Output current of the interface, max.</li> <li>• Design of the connection</li> </ul>	<p>70 mA 9-pin sub D socket</p>
<b>PROFIBUS DP slave</b>	
<ul style="list-style-type: none"> <li>• GSD file</li> <li>• automatic baud rate search</li> </ul>	<p>SI05801E.GSG Yes</p>
<b>Protocols</b>	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
<b>Protocols (Ethernet)</b>	
<ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	No
<b>PROFIBUS DP</b>	
<ul style="list-style-type: none"> <li>• Number of node addresses, max.</li> </ul>	1 to 125 permitted
<b>Services</b>	
<ul style="list-style-type: none"> <li>— SYNC capability</li> <li>— FREEZE capability</li> <li>— Direct data exchange (slave-to-slave communication)</li> </ul>	<p>Yes Yes Yes; as publisher with all IO, as subscriber with F-IO only</p>
<b>Potential separation</b>	
Potential separation exists	Yes
<b>Isolation</b>	
Isolation tested with	Isolation voltage 500 V
<b>Ambient conditions</b>	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> <li>• horizontal installation, min.</li> <li>• horizontal installation, max.</li> <li>• vertical installation, min.</li> <li>• vertical installation, max.</li> </ul>	<p>0 °C 60 °C 0 °C 60 °C 0 °C 40 °C</p>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	3 000 m
<b>Configuration</b>	
Configuration software	
<ul style="list-style-type: none"> <li>• STEP 7</li> </ul>	Yes; STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file
<b>Dimensions</b>	
Width	40 mm
Height	125 mm
Depth	117 mm
<b>Weights</b>	
Weight, approx.	360 g
<b>last modified:</b>	12/19/2020 