

SIMATIC DP, interface DP/PA-Link and ET200M IM153-2 HF for extended temperature range 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 instructions in manual +++

General information	
Product type designation	IM 153-2 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
Inrush current, typ.	3 A
I <sup>2</sup> t	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> </ul>	244 byte
<ul style="list-style-type: none"> <li>Outputs</li> </ul>	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
Interface types	
<ul style="list-style-type: none"> <li>Output current of the interface, max.</li> </ul>	70 mA
<ul style="list-style-type: none"> <li>Design of the connection</li> </ul>	9-pin sub D socket
PROFIBUS DP slave	
<ul style="list-style-type: none"> <li>GSD file</li> </ul>	SI05801E.GSG
<ul style="list-style-type: none"> <li>automatic baud rate search</li> </ul>	Yes

Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
PROFIBUS DP	
<ul style="list-style-type: none"> <li>Number of node addresses, max.</li> </ul>	1 to 125 permitted
Services	
<ul style="list-style-type: none"> <li>— SYNC capability</li> <li>— FREEZE capability</li> <li>— Direct data exchange (slave-to-slave communication)</li> </ul>	Yes Yes Yes; as publisher with all IO, as subscriber with F-IO only
Potential separation	
Potential separation exists	Yes
Isolation	
Isolation tested with	Isolation voltage 500 V
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>	-25 °C 60 °C -25 °C 40 °C
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
Configuration	
Configuration software	
<ul style="list-style-type: none"> <li>STEP 7</li> </ul>	Yes; STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weights	
Weight, approx.	360 g
<b>last modified:</b>	12/18/2020 