



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
Vendor identification (VendorID)	801Eh
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)	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.	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	
• Inputs	244 byte
• Outputs	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 procedure	RS 485
Transmission rate, max.	12 Mbit/s
1. Interface	
automatic detection of transmission rate	Yes
Interface types	
• Output current of the interface, max.	70 mA
• Design of the connection	9-pin sub D socket
PROFIBUS DP slave	
• GSD file	SI05801E.GSG
• automatic baud rate search	Yes
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
Protocols (Ethernet)	
• TCP/IP	No
PROFIBUS DP	
• Number of node addresses, max.	1 to 125 permitted
Services	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes; as publisher with all IO, as subscriber with F-IO only

## Potential separation

Potential separation exists	Yes
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## Isolation

Isolation tested with	Isolation voltage 500 V
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## Degree and class of protection

IP degree of protection	IP20
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## Ambient conditions

### Ambient temperature during operation

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|---------------------------------|-------|
| • min.                          | 0 °C  |
| • max.                          | 60 °C |
| • horizontal installation, min. | 0 °C  |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min.   | 0 °C  |
| • vertical installation, max.   | 40 °C |

### Altitude during operation relating to sea level

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|---|---------|
| • Installation altitude above sea level, max. | 3 000 m |
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## Configuration

### Configuration software

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|----------|---|
| • STEP 7 | Yes; STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file |
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## Dimensions

Width	40 mm
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Height	125 mm
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Depth	117 mm
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## Weights

Weight, approx.	360 g
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<b>last modified:</b>	09/03/2020
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