



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
<ul style="list-style-type: none"> • 24 V DC 	Yes
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"> • Mains/voltage failure stored energy time 	5 ms
Input current	
Current consumption, max.	650 mA; with 24 V DC supply
Inrush current, typ.	3 A
I^2t	0.1 A ² ·s
Output current	

for backplane bus (5 V DC), max.	1.5 A
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Power loss

Power loss, typ.	5.5 W
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Address area

Addressing volume	
• Inputs	244 byte
• Outputs	244 byte

Hardware configuration

Number of modules per DP slave interface, max.	12
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Time stamping

Accuracy	1 ms; 1ms at up to 8 modules; 10ms 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
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PROFIBUS DP

• Node addresses	1 to 125 permitted
• automatic detection of transmission rate	Yes
• Output current, max.	70 mA
• Transmission rate, max.	12 Mbit/s
• 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
• Design of electrical connection of PROFIBUS interface	9-pin sub D

1. Interface

PROFIBUS DP slave

• GSD file	SI05801E.GSG
• automatic baud rate search	Yes

Protocols

Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
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Protocols (Ethernet)

• TCP/IP	No
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Potential separation

Potential separation exists Yes

Isolation

Isolation tested with Isolation voltage 500 V

Degree and class of protection

IP degree of protection IP20

Ambient conditions

Ambient temperature during operation

- 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

- Installation altitude above sea level, max. 3 000 m

Configuration

Configuration software

- STEP 7 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

last modified: 11/08/2019 