

Data sheet

6ES7153-2BA02-0XB0



Figure similar

Spare part 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

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General information

Product type designation	IM 153-2 DP HF
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

• Mains/voltage failure stored energy time	5 ms
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Input current

Current consumption, max.	600 mA
Inrush current, typ.	3 A
I^2t	0.1 A ² ·s

Output voltage

Rated value (DC)	5 V
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	SI04801.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
- Direct data exchange (slave-to-slave communication)

Yes
Yes; Sender

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

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

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