

SIMATIC DP, ET 200M INTERFACE IM 153-2 HIGH FEATURE FOR
MAX. 12 S7-300 MODULES, WITH REDUNDANCY, TIME
STAMPING FIT FOR ISOCHRON MODE NEW FEATURES: 12
MODULES / STATION SLAVE INITIATIVE FOR SWITCHES AND
DRIVE ES EXTENDED DATA FOR HART SECONDARY
VARIABLES OPERATION WITH 64PT MODULES EXTENDED
TIMESTAMPS WITH 32 SIGNALS / SLOT +++ SEE
COMPATIBILITY NOTES IN THE MANUAL +++

General information

Vendor identification (VendorID)	801Eh
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Supply voltage

Rated value (DC)	24 V
• 24 V DC	Yes
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
permissible range (ripple included), lower limit (DC)	20.4 V
permissible range (ripple included), 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.	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

Interface physics, RS 485	Yes
Interface physics, FOC	No

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 |
| • Transmission procedure | RS 485 |
| • 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 |
| • Connector type | 9-pin sub D |

1. Interface

DP slave	
• GSD file	SI05801E.GSD
• automatic baud rate search	Yes

Protocols

Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
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Isolation

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

Degree of protection acc. to EN 60529	
• IP20	Yes

Ambient conditions

Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
Air pressure acc. to IEC 60068-2-13	
• Operating 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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