

SIEMENS

Product data sheet

6ES7153-2BA02-0XB0


SIMATIC DP,
ET 200M INTERFACE IM 153-2 HIGH FEATURE FOR
MAX. 12 S7-300 MODULES,
WITH REDUNDANCY,
TIME STAMPING FIT FOR ISOCHRONOUS MODE NEW
FEATURES: 12 MODULES / STATION SLAVE
INITIATIVE FOR SWITCHES AND DRIVES
EXTENDED DATA FOR HART SECONDARY
VARIABLES OPERATION WITH 64PT MODULES
EXTENDED TIMESTAMPS WITH 32 SIGNALS /
SLOT

General information

Vendor identification (VendorID)	801Eh
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Supply voltage

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 supply cables (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
Rated value at 24 V DC	650 mA
Inrush current, typ.	3 A

I^2t	0.1 A ² ·s
Output voltage	
Rated value, 5 V DC	Yes
Output current	
for backplane bus (5 V DC), max.	1.5 A
Power losses	
Power loss, typ.	5.5 W
Address area	
Addressing volume	
Outputs	244 byte
Inputs	244 byte
Hardware configuration	
Number of modules per DP slave interface, max.	12
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	1000 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 speed	Yes
PROFIBUS DP, output current, max.	70 mA
Transmission procedure	RS 485
Transmission rate, max.	12 Mbit/s
SYNC capability	Yes

FREECE capability	Yes
Direct data exchange (slave-to-slave communication)	Yes ; Sender
PROFIBUS DP	9-pin sub D
1st interface	
DP slave	
GSD file	SI04801.GSG
Automatic baud rate search	Yes
Communication functions	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
Isolation	
Isolation checked with	Isolation voltage 500 V
Degree and class of protection	
IP20	Yes
Ambient conditions	
Operating temperature	
Min.	0 °C
max.	60 °C
Air pressure	
Operating altitude above sea level, max.	3000 m
Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm
Weight	
Weight, approx.	360 g
Status	Jul 17, 2012