

SIPLUS ET200M IM153-2 (*BA02) -25 ... +60 DEGREES C
 CONFORMITY WITH EN50155 T1 WITH CONFORMAL COATING
 BASED ON 6ES7153-2BA10-0XB0 . INTERFACE ET 200M 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
Supply voltage	
Rated value (DC)	
• 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
Input current	
Current consumption, max.	650 mA; with 24 V DC supply
Inrush current, typ.	3 A
I ² t	0.1 A ² ·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; 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 • automatic detection of transmission rate • Output current, max. • Transmission rate, max. • Transmission procedure • SYNC capability • FREEZE capability • Direct data exchange (slave-to-slave communication) • Connector type	1 to 125 permitted Yes 70 mA 12 Mbit/s RS 485 Yes Yes Yes; as publisher with all IO, as subscriber with F-IO only 9-pin sub D

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

Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170

Isolation	
Isolation tested with	Isolation voltage 500 V

Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP20	Yes

Standards, approvals, certificates	
CE mark	Yes
Railway application	
• EN 50155	Yes; T1 Category 1 Class A/B horizontal mounting position

Ambient conditions	
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Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	60 °C; = Tmax; the rated temperature range of -25 ... +55 °C (T1) applies for the use on railway vehicles according to EN50155
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Extended ambient conditions	
• relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
• At cold restart, min.	-25 °C
Relative humidity	
— With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
— against biologically active substances / conformity with EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
— against chemically active substances / conformity with EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
— against mechanically active substances / conformity with EN 60721-3-3	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
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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