

Spare part SIPLUS ET 200M IM 153-2 -25...+60 °C according to EN 50155 with conformal coating based on 6ES7153-2BA02-0XB0

General information

Vendor identification (VendorID)	801Eh
----------------------------------	-------

Supply voltage

Rated value (DC)	Yes; A power supply according to EN 50155 shall be used
<ul style="list-style-type: none"> • 24 V DC 	
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.	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	
<ul style="list-style-type: none"> • Inputs 	244 byte
<ul style="list-style-type: none"> • 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

Transmission procedure	RS 485
Interface physics, RS 485	Yes
Interface physics, FOC	No

PROFIBUS DP

<ul style="list-style-type: none"> • Node addresses 	1 to 125 permitted
<ul style="list-style-type: none"> • automatic detection of transmission rate 	Yes
<ul style="list-style-type: none"> • Output current, max. 	70 mA
<ul style="list-style-type: none"> • Transmission rate, max. 	12 Mbit/s
<ul style="list-style-type: none"> • SYNC capability 	Yes
<ul style="list-style-type: none"> • FREEZE capability 	Yes
<ul style="list-style-type: none"> • Direct data exchange (slave-to-slave communication) 	Yes; Sender
<ul style="list-style-type: none"> • Design of electrical connection of PROFIBUS interface 	9-pin sub D

1. Interface

DP slave	
<ul style="list-style-type: none"> • GSD file 	SI04801.GSG
<ul style="list-style-type: none"> • automatic baud rate search 	Yes

Protocols

Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
------------------------------------	-------------------------

Potential separation

Potential separation exists	Yes
-----------------------------	-----

Isolation

Isolation tested with	500V AC for 1 minute
-----------------------	----------------------

Degree and class of protection

IP degree of protection	IP20
-------------------------	------

Standards, approvals, certificates

CE mark	Yes
UL approval	Yes; File E239877
FM approval	Yes; CofC 3028431
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes

Railway application

- EN 50155

Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B

Ambient conditions

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
Altitude during operation relating to sea level	
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax - 20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to 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!
— to mechanically active substances according to 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
last modified:	05/16/2018