

\*\*\*Spare part\*\*\* SIPLUS ET 200M IM 153-2 (\*BA02) -40...+70 °C  
 Start-up temperature:-25 °C with conformal coating based on  
 6ES7153-2BA02-0XB0 Connection ET 200M for max. 12 S7-300  
 modules with redundancy capability, Timestamping suitable for  
 isochronous mode Operation 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

### General information

Product type designation	IM 153-2 DP ST
Vendor identification (VendorID)	801Eh

### Supply voltage

Rated value (DC)	
<ul style="list-style-type: none"> <li>• 24 V DC</li> </ul>	Yes
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"> <li>• Mains/voltage failure stored energy time</li> </ul>	5 ms
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### Input current

Current consumption, max.	600 mA
Inrush current, typ.	3 A
$I^2t$	0.1 A <sup>2</sup> ·s

### Output voltage

Rated value (DC)	5 V
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### 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	
<ul style="list-style-type: none"> <li>• Inputs</li> </ul>	244 byte
<ul style="list-style-type: none"> <li>• Outputs</li> </ul>	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	
Transmission procedure	RS 485
Interface physics, RS 485	Yes
Interface physics, FOC	No

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

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

Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170

Potential separation	
Potential separation exists	Yes

Isolation	
Isolation tested with	Isolation voltage 500 V

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

### Ambient conditions

#### Ambient temperature during operation

- min. -40 °C; = Tmin
- max. 70 °C; = Tmax; 60 °C @ UL/cUL use
- At cold restart, min. -25 °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
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**last modified:** 05/16/2018