

Product type designation

ESM ITP80

SIMATIC NET, ESM ITP80 ELECTRICAL SWITCH MODULE WITH 8 ITP-PORTS 10/100MBIT/S AND 8 DIGITAL INPUTS; REDUNDANT 24V DC SUPPLY SIGNAL CONTACT, INTEGRATED REDUNDANCY MANAGER, WITH NETWORK MANAGEMENT AMBIENT TEMPERATURE MAX. +55 DEGR. C.



Transmission rate

Transfer rate	10 Mbit/s, 100 Mbit/s
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Interfaces / for communication / integrated

Number of electrical connections	
<ul style="list-style-type: none"> for network components or terminal equipment 	8
Number of 100 Mbit/s SC ports	
<ul style="list-style-type: none"> for multimode 	0
Number of 1000 Mbit/s LC ports	
<ul style="list-style-type: none"> for multimode for single mode (LD) 	0

Interfaces / others

Number of electrical connections	
<ul style="list-style-type: none"> for signaling contact for power supply for redundant voltage supply 	1
Type of electrical connection	
<ul style="list-style-type: none"> for signaling contact 	On 6-pole terminal block

- for power supply

6-pole plug-in terminal block

Signal-Inputs/outputs

Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> • at DC / Rated value 	24 V
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> • at DC / maximum 	0.1 A
Number of digital inputs	8
Number of electrical connections / for digital input signals	2
Type of electrical connection / for digital input signals	6-pole plug-in terminal block
Signal voltage	
<ul style="list-style-type: none"> • for signal <0> / at DC — Rated value 	-30 ... +3 V 24 V
<ul style="list-style-type: none"> • for signal <1> / at DC — Rated value 	13 ... 30 V 24 V
Input current / at digital input	
<ul style="list-style-type: none"> • with signal <0> / maximum • for signal <1> 	0.008 mA 0.008 A

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage	
<ul style="list-style-type: none"> • external • external 	24 V 18 ... 32 V
Product component / fusing at power supply input	Yes
Fuse protection type / at input for supply voltage	T 1.6 A / 250 V
Consumed current / maximum	1 A
Power loss [W]	
<ul style="list-style-type: none"> • at DC / at 24 V 	20 W

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	0 ... 60 °C -40 ... +80 °C -40 ... +80 °C
Relative humidity	
<ul style="list-style-type: none"> • at 25 °C / without condensation / during operation / maximum 	95 %
Protection class IP	IP20

Design, dimensions and weight

Width	217 mm
Height	161 mm
Depth	69 mm

Net weight	1.4 kg
Mounting type	
<ul style="list-style-type: none"> • 35 mm DIN rail mounting • wall mounting • S7-300 rail mounting • S7-1500 rail mounting • fixed-mounted 	<ul style="list-style-type: none"> Yes Yes Yes No Yes

Product properties, functions, components / general

Cascading in the case of a redundant ring / at reconfiguration time of $\sim 0.3\text{ s}$	50
Cascading in cases of star topology	any (depending only on signal propagation time)

Product functions / management, configuration

Product function	
<ul style="list-style-type: none"> • CLI • web-based management • MIB support • TRAPs via email • RMON • Port mirroring • multiport mirroring • switch-managed 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes No Yes
Protocol / is supported	
<ul style="list-style-type: none"> • Telnet • HTTP • TFTP • FTP • BOOTP • SNMP v1 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes

Product functions / Diagnosis

Product function	
<ul style="list-style-type: none"> • Statistics Packet Size • Statistics packet type • Error statistics 	<ul style="list-style-type: none"> Yes Yes Yes

Product functions / DHCP

Product function	
<ul style="list-style-type: none"> • DHCP client 	<ul style="list-style-type: none"> Yes

Product functions / Redundancy

Product function	
<ul style="list-style-type: none"> • Ring redundancy • High Speed Redundancy Protocol (HRP) 	<ul style="list-style-type: none"> Yes Yes

<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • high speed redundancy protocol (HRP) with standby redundancy 	Yes
Product function	
<ul style="list-style-type: none"> • media redundancy protocol (MRP) with redundancy manager 	Yes
<ul style="list-style-type: none"> • Parallel Redundancy Protocol (PRP)/operation in the PRP-network 	No
<ul style="list-style-type: none"> • Parallel Redundancy Protocol (PRP)/Redundant Network Access (RNA) 	No

Product functions / Time

Product function	
<ul style="list-style-type: none"> • SICLOCK support 	Yes

Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> • for FM 	FM3611: Class 1, Divison 2, Group A, B, C, D / T.. A, CL.1, Zone 2, GP. IIC, T4
<ul style="list-style-type: none"> • for safety / from CSA and UL 	UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> • for emitted interference 	EN 61000-6-4
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2
Certificate of suitability / CE marking	Yes
Certificate of suitability	
<ul style="list-style-type: none"> • C-Tick 	Yes
<ul style="list-style-type: none"> • KC approval 	No
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	Yes
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	Yes
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	Yes
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	Yes
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	Yes
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	Yes

Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb

- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

Security information

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

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