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SCALANCE SC642-2C Industrial Security Appliance; For protection of devices and networks in discrete manufacturing and the process industry For protection of industrial communication with firewall and VPN; Further functions: Address translation (NAT/NAPT); Connection to SINEMA RC; 2x combo port electrical or optical; 10/100/1000 Mbps RJ45 or 100 Mbps SFP or 1000 Mbps SFP

Transfer rate	
Transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s

Interfaces	
Number of electrical/optical connections / for network components or terminal equipment / maximum	2
Number of electrical connections	
• for signaling contact	1
• for power supply	1
• for redundant voltage supply	1
Type of electrical connection	
• for signaling contact	2-pole terminal block
• for power supply	4-pole terminal block
design of the removable storage / C-PLUG	Yes

Signal inputs/outputs	
Number of electrical connections	
• for digital input signals	1
Type of electrical connection	
• for digital input signals	2-pole terminal block

Operating voltage / of the signaling contacts / at DC / Rated value	24 V
Operating current / of the signaling contacts / at DC / maximum	0.1 A

Supply voltage, current consumption, power loss

Supply voltage / external	24 V
Supply voltage / external	9.6 ... 31.2 V
Type of voltage / of the supply voltage	DC
Consumed current / maximum	0.38 A
Power loss [W]	
● at DC / at 24 V / typical	9.12 W
● Note	(with plugged-in SFPs)

Ambient conditions

Ambient temperature	
● during operation	-40 ... +70 °C
● during storage	-40 ... +85 °C
● during transport	-40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weights

Design	compact
Width	60 mm
Height	145 mm
Depth	125 mm
Net weight	0.58 kg
Mounting type	Fixing bolt with additional screw protection
Mounting type	
● 35 mm DIN rail mounting	Yes
● S7-300 rail mounting	Yes
● S7-1500 rail mounting	Yes
● wall mounting	Yes

Product features, product functions, product components / general

Product function / DynDNS client	Yes

Product functions / management, configuration, engineering

Product function	
● CLI	Yes
● web-based management	Yes
● MIB support	Yes
Protocol / is supported	
● HTTP	No

• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
Type of configuration	WBM, CLI, SNMP

Product functions / Diagnostics

Product function	
• SysLog	Yes
• Packet Filter Log	Yes
• Audit Log	Yes
• System log	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP server - internal network	Yes

Product functions / Routing

Product function / Static IP routing	Yes

Product functions / Security

Firewall version	stateful inspection
Product function / with VPN connection	IPsec, OpenVPN (as client for SINEMA RC)
Type of encryption algorithms / with VPN connection	AES-256, AES-192, AES-128, 3DES-168, DES-56
Type of authentication procedure / with VPN connection	Preshared key (PSK), X.509v3 certificates
Type of hashing algorithms / with VPN connection	MD5, SHA-1, SHA-256, SHA-384, SHA-512
Number of possible connections / with VPN connection	200
Product function	
• Password protection	Yes
• Bandwidth limiting	No
• NAT/NAPT	Yes

Product functions / time

Protocol / is supported / NTP	Yes
Product feature / Hardware real-time clock w. battery backup	Yes

Standards, specifications, approvals

Standard	
• for FM	FM 3611 (available soon)
• for hazardous zone	EN 60079-0: 2006, EN60079-15: 2005, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X
• for safety / from CSA and UL	UL 60950 / CSA C22.2 No. 60950-1-03, CSA C22.2 No. 213-M1987 (in preparation)
• for emitted interference	EN 61000-6-4: 2007

● for interference immunity	EN 61000-6-2: 2005
Certificate of suitability	AS/NZS 2064 (Class A), EN 61000-6-2, EN 61000-6-4
Certificate of suitability	
● CE marking	Yes
● C-Tick	Yes
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	Yes
● Bureau Veritas (BV)	Yes
● DNV GL	Yes
● Korean Register of Shipping (KRS)	Yes

accessories

Product extension / optional / C-PLUG	Yes

Further information / Internet-Links

Internet-Link	
● to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
● to website: Industrial communication	http://www.siemens.com/simatic-net
● to website: Industry Mall	https://mall.industry.siemens.com
● to website: Information and Download Center	http://www.siemens.com/industry/infocenter
● to website: Image database	http://automation.siemens.com/bilddb
● to website: CAx Download Manager	http://www.siemens.com/cax
● to website: Industry Online Support	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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