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Data sheet	6GK6023-0AS2.-....

Product type designation	RUGGEDCOM RSG2300
	THE RUGGEDCOM RSG2300 IS AN INDUSTRIALLY HARDENED, FULLY MANAGED, MODULAR ETHERNET SWITCH; 128-BIT ENCRYPTION; 24 10/100TX COPPER PORTS OPTIONAL: UP TO 4 1000LX GIGABIT ETHERNET PORTS (COPPER AND/OR FIBER) AND UP TO 8 100FX FIBER FAST ETHERNET PORTS; 2 PORT MODULES FOR TREMENDOUS FLEXIBILITY; NON-BLOCKING, STORE AND FORWARD SWITCHING; MULTIMODE, SINGLEMODE; LONG HAUL OPTICS ALLOW DISTANCES UP TO 90KM; MULTIPLE CONNECTOR TYPES (ST, MTRJ, LC, SC)

Figure similar

Transmission 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	32; 24 x 10/100TX copper ports + up to 8 additional ports
• for gigabit Ethernet / maximum	4
Number of electrical connections	
• for network components or terminal equipment / maximum	28
• for gigabit Ethernet / maximum	4
Number of optical interfaces	
• for network components or terminal equipment / maximum	8
Range / at the optical interface / depending on the optical fiber used	2 ... 90 km
• with gigabit	0.5 ... 70 km

Interfaces / others	

Number of electrical connections	
• for operator console	1
• for management purposes	0
Type of electrical connection	
• for operator console	RJ45
• for power supply and signaling contact	10-pole terminal block, screwable or plugable, screw contact

Signal-Inputs/outputs

Relay design	Form-C contact relay (SP CO)
Type of relay output	Changeover contact
Operating voltage / of the signaling contacts	
• at AC / maximum	250 V
• at DC / maximum	125 V
Operating current / of the signaling contacts	
• at AC / at 250 V / maximum	2 A
• at DC / at 30 V / maximum	2 A

Supply voltage, current consumption, power loss

product options / wide range power supply	Yes
Supply voltage / 1 / Rated value	24 V
• Supply voltage / 1 / rated value	12 ... 36 V
• Type of voltage / 1 / of the supply voltage	DC
• Consumed current / 1 / at rated supply voltage / maximum	1.2 A
Supply voltage / 2 / Rated value	48 V
• Supply voltage / 2 / rated value	36 ... 59 V
• Type of voltage / 2 / of the supply voltage	DC
• Consumed current / 2 / at rated supply voltage / maximum	0.6 A
Supply voltage / 3 / Rated value	
• Supply voltage / 3 / rated value	88 ... 300 V
• Type of voltage / 3 / of the supply voltage	DC
Supply voltage / 4 / Rated value	
• Supply voltage / 4 / rated value / minimum	85 V
• Supply voltage / 4 / rated value / maximum	264 V
• Type of voltage / 4 / of the supply voltage	AC
Power loss [W]	
• maximum	32 W

Permitted ambient conditions

Ambient temperature	
• during operation	-40 ... +85 °C
• Note	A maximum operating temperature of +85 °C is permissible for a duration of 16 hours

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Operating condition / fanless operation	Yes
Coating	Conformal Coating optional
Protection class IP	IP40

Design, dimensions and weight

Display version / LED panel mounted on the front or on the rear side	Yes
Design	19" rack
Number of modular height units / relating to 19-inch cabinet	1
Number of slots	4
Width	464.8 mm
Height	44.2 mm
Depth	315 mm
Net weight	5.2 kg
Material / of the enclosure	18 AWG galvanized steel enclosure
Mounting type	
• 19-inch installation	Yes
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

Product properties, functions, components / general

Number of automatically learnable MAC addresses	8192
Storage capacity	
• of the MAC-address table	64 Kibyte
Switch latency period	7 µs
Transfer rate / of the switch	13.6 Gbit/s
Number of priority channels	4
Product feature	
• no head-off-line-blocking	Yes
• Store & Forward switching method	Yes
• Zero-Packet-Loss technology	Yes

Product functions / management, configuration

Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• RMON	Yes
• switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes

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• SFTP	Yes
• IGMP (snooping/querier)	Yes
Number of groups / at IGMP	256
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	No
• SNMP v2c	Yes
• SNMP v3	Yes
Product function / for MIB support	
• by BRIDGE-MIB	RFC1493
• by IF-MIB	RFC2863
• by RMON-MIB	RFC2819
• by RSTP-MIB	draft-ietf-bridge-bridgemib-smiv2-03-RSTP-MIB
• by SNMPv2-MIB	RFC1907
• by SNMPv2-SMI	RFC2578
• by SNMPv2-TC	RFC2579
• by TCP-MIB	RFC2012
• by UDP-MIB	RFC2013

Product functions / VLAN

Product function	
• VLAN - port based	Yes
Number of VLANs / maximum	255
VLAN identification number	1 ... 4094
Protocol / is supported / GVRP	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP Option 82	Yes
• DHCP Option 66	No
• DHCP Option 67	No

Product functions / Redundancy

Product function	
• redundancy procedure STP	Yes
• redundancy procedure RSTP	Yes
• redundancy procedure MSTP	Yes
• eRSTP	Yes
Protocol / is supported	
• STP	Yes
• RSTP	Yes
• MSTP	Yes

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Product functions / Security

Product function	
● ACL - MAC-based	Yes
● IEEE 802.1x (radius)	Yes
● Blocking of communication via physical ports	Yes
Protocol / is supported	
● TACACS+	Yes
● SSH	Yes
● SSL	Yes
Key length	
● with SSL	128 bit
● with RSA	1024 bit
Product function / port-rate-limiting	Yes

Product functions / Time

Product function	
● SNTP client	Yes
● SNTP server	Yes
Protocol / is supported	
● SNTP	Yes

Standards, specifications, approvals

Standard	
● for EMC	FCC Part 15 (Class A), EN55022 (CISPR22 Class A)
● for safety / from CSA and UL	cCSAus (Compliant with CSA C22.2 No. 60950, UL60950, EN60950)
Laser protection class	Complies with 21 CFR chapter 1, subchapter J
Certificate of suitability	
● CE marking	Yes
● IEC 61850-3	Yes
product conformity	
● acc. to IEEE 802.3-10BaseT	Yes
● acc. to IEEE 802.3u-100BaseTX	Yes
● acc. to IEEE 802.3u-100BaseFX	Yes
● acc. to IEEE 802.3ab-1000BaseT	Yes
● acc. to IEEE 802.3z-1000BaseLX	Yes
● acc. to IEEE 802.3ad-Link Aggregation	Yes
● acc. to IEEE 802.3x-Flow Control	Yes
● acc. to IEEE 802.1d-MAC Bridges	Yes
● acc. to IEEE 802.1d-STP	Yes
● acc. to IEEE 802.1p-class of service	Yes
● acc. to IEEE 802.1Q-VLAN tagging	Yes

● acc. to IEEE 802.1Q-2005 (formerly IEEE 802.1s) MSTP	Yes
● acc. to IEEE 802.1w-RRST	Yes
● acc. to IEEE 802.1x-port based Network Access Control	Yes
● RFC768-UDP	Yes
● RFC783-TFTP	Yes
● RFC791-IP	Yes
● RFC792-ICMP	Yes
● RFC793-TCP	Yes
● RFC826-ARP	Yes
● RFC854-Telnet	Yes
● RFC894-IP over Ethernet	Yes
● RFC1112-IGMPv1	Yes
● RFC1519-CIDR	Yes
● RFC1541-DHCP (client)	Yes
● RFC2068-HTTP	Yes
● RFC2236-IGMPv2	Yes
● RFC2284-EAP	Yes
● RFC2475-Differentiated Service	Yes
● RFC2865-RADIUS	Yes
● RFC3414-SNMPv3-USM	Yes
● RFC3415-SNMPv3-VACM	Yes

Further Information / Internet Links

Internet-Link

● to website: Industry Mall/RUGGEDCOM selector	http://ruggedcom-selector.automation.siemens.com
● to website: Siemens RUGGEDCOM	http://siemens.com/ruggedcom
● to website: Selector for cables and connectors	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

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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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