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Data sheet   **6GK6090-0AS1.-....**

Figure similar

RUGGEDCOM RS900NC is a 9-port, industrially hardened, fully managed Ethernet switch with 56-bit encryption supporting 6 Fast Ethernet RJ45 ports and up to 3 Fast Ethernet Fiber ports available over multiple fiber connector types and distances.

product type designation	RUGGEDCOM RS900NC
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s
number of ports / maximum	9; Number of ports depending on configuration
interfaces / other	
number of electrical connections	
● for operator console	1
● for management purposes	0
type of electrical connection	
● for operator console	RS232
● for signaling contact	3-pole terminal block, screwable
● for power supply	5-pole terminal block, screwable
signal inputs/outputs	
relay design	Form-C contact relay (SPDT)
type of relay output	Changeover contact (CO)
operational current / of the signaling contacts	
● at DC / at 30 V / maximum	2 A
supply voltage, current consumption, power loss	
product options / wide range power supply	Yes
type of voltage / 1 / of the supply voltage	DC
● supply voltage / 1 / rated value	24 V
● power loss [W] / 1 / rated value	10 W
● consumed current / 1 / at rated supply voltage / maximum	0.4 A
● supply voltage / 1 / rated value	10 ... 36 V
type of voltage / 2 / of the supply voltage	DC
● supply voltage / 2 / rated value	48 V
● consumed current / 2 / at rated supply voltage / maximum	0.2 A
● supply voltage / 2 / rated value	36 ... 72 V
type of voltage / 3 / of the supply voltage	DC
● supply voltage / 3 / rated value	88 ... 300 V
type of voltage / 4 / of the supply voltage	AC
● supply voltage / 4 / rated value	85 ... 264 V
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
operating condition / fanless operation	Yes
protection class IP	IP40

design, dimensions and weights

design	compact
width	66 mm
height	188 mm
depth	127 mm
net weight	1.22 kg
product feature / conformal coating	optional
material / of the enclosure	20 AWG galvanized steel enclosure
fastening method	
• 19-inch installation	No
• 35 mm top hat DIN rail mounting	Yes
• wall mounting	Yes

product features, product functions, product components / general

number of automatically learnable MAC addresses	8192
storage capacity	
• of message buffer / maximum	128 Kibyte
switch latency period	4 µs
transfer rate / of the switch	7.6 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; Zero-Packet-Loss applies to fiber optic interfaces

product functions / management, configuration, engineering

product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• RMON	Yes
product function / switch-managed	Yes
protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• SFTP	No
• SNMP v1	Yes
• SNMP v2	No
• SNMP v2c	Yes
• SNMP v3	Yes
• IGMP (snooping/querier)	Yes
number of groups / at IGMP	256
product function	
• for MIB support / by BRIDGE-MIB	RFC4188
• for MIB support / by IF-MIB	RFC2863
• for MIB support / by RMON-MIB	RFC2819
• for MIB support / by RSTP-MIB	RFC4318
• for MIB support / by SNMPv2-MIB	RFC1907
• for MIB support / by SNMPv2-SMI	RFC2578
• for MIB support / by SNMPv2-TC	RFC2579
• for MIB support / by TCP-MIB	RFC2012
• for MIB support / 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
product functions / security	
product function	
● IEEE 802.1x (radius)	Yes
protocol / is supported	
● TACACS+	Yes
● SSH	No
● SSL	Yes
key length	
● with SSL	56 bit
● with RSA	1024 bit
product function / port-rate-limiting	Yes
adjustable port-rate-limitation	128 kbit/s ... 8 Mbit/s
product functions / time	
product function	
● SNTP client	Yes
● SNTP server	Yes
protocol / is supported	
● SNTP	Yes
standards, specifications, approvals	
standard	
● for safety / from CSA and UL	cCSAus (Compliant with CSA C22.2 No. 60950, UL60950, EN60950)
reference code	
● according to IEC 81346-2	KF
● according to IEC 81346-2:2019	KFE
standards, specifications, approvals / CE	
certificate of suitability / CE marking	Yes
standard	
● for EMC	FCC Part 15 (Class A), EN55022 (CISPR22 Class A)
standards, specifications, approvals / other	
laser protection class	Complies with 21 CFR chapter 1, subchapter J
certificate of suitability	
● IEC 61850-3	Yes
● according to FIPS 140-2	No
● according to Common Criteria (CC)	No
standards, specifications, approvals / product conformity	
product conformity	
● according to IEEE 802.3-10BaseT	Yes
● according to IEEE 802.3u-100BaseTX	Yes
● according to IEEE 802.3u-100BaseFX	Yes
● according to IEEE 802.3ad-Link Aggregation	Yes
● according to IEEE 802.3x-Flow Control	Yes
● according to IEEE 802.1d-MAC Bridges	Yes
● according to IEEE 802.1d-STP	Yes
● according to IEEE 802.1p-class of service	Yes
● according to IEEE 802.1Q-VLAN tagging	Yes
● according to IEEE 802.1Q-2005 (formerly IEEE 802.1s) MSTP	Yes

● according to IEEE 802.1w-RRST	Yes
● according 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: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
● to website: Image database	https://www.automation.siemens.com/bilddb
● 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, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under https://www.siemens.com/cert. (V4.6)

Approvals / Certificates

General Product Approval

CSA	UL	DNV	Manufacturer Declaration	UKCA	CE EG-Konf.

General Product Approval		For use in hazardous locations	Test Certificates	other
KC	KC	RCM	CSA	CB	inspection certificate

Dangerous Good	Environment
Dangerous Goods In-	EPD Typ II/III (with life

formation   cylce assessment)

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