

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)



product type designation	RUGGEDCOM RSG2300
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
number of ports / maximum	32; 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	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 (SPDT)
type of relay output	changeover contact (CO)
operating voltage / of the signaling contacts	
• at AC / maximum	230 V
• at DC / maximum	250 V
operational 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
type of voltage / 1 / of the supply voltage	DC
• supply voltage / 1 / rated value	24 V
• power loss [W] / 1 / rated value	25 W
• consumed current / 1 / at rated supply voltage / maximum	1.2 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	0.6 A
• supply voltage / 2 / rated value	36 ... 59 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	IP3X
design, dimensions and weights	
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	438.15 mm
height	44.45 mm
depth	303.28 mm
net weight	5.2 kg
product feature / conformal coating	optional
material / of the enclosure	18 AWG galvanized steel enclosure
fastening method	
• 19-inch installation	Yes
• 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 the MAC-address table	64 Kibyte
• of message buffer / maximum	640 Kibyte
switch latency period	6 µs
transfer rate / of the switch	50.4 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	Yes
• 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	
• ring redundancy	Yes
protocol / is supported / Media Redundancy Protocol (MRP)	Yes
product function	
• media redundancy protocol (MRP) with redundancy manager	Yes
• 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	
• 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 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 802.3ab-1000BaseT	Yes
• according to IEEE 802.3z-1000BaseLX	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: Industry Mall/RUGGEDCOM selector	http://ruggedcom-selector.automation.siemens.com
• to website: Siemens RUGGEDCOM	http://siemens.com/ruggedcom
• 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: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
• 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

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