

**Product type designation****RUGGEDCOM RSG2300P**

THE RUGGEDCOM RSG2300P IS AN INDUSTRIALLY HARDENED, FULLY MANAGED, MODULAR ETHERNET SWITCH; 128-BIT ENCRYPTION; 2 X 10/100BASETX 802.3AF (POE) COMPLIANT ETHERNET PORTS, WITH THE OPTION TO ADD AN ADDITIONAL 2 POE PORTS, UP TO 6 ADDITIONAL ETHERNET POR INCLUDING 10BASEFL /100BASEFX/ 1000BASEX FIBER AND 10/100/1000BASETX COPPER PORT COMBINATIONS.



Figure similar

**Transmission rate**

Transfer rate	10 Mbit/s, 100 Mbit/s
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**Interfaces**

Number of electrical/optical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment / maximum</li> </ul>	32; 24 x 10/100TX copper ports + up to 8 additional ports via slots
<ul style="list-style-type: none"> <li>for gigabit Ethernet / maximum</li> </ul>	4
Number of electrical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment / maximum</li> </ul>	28
<ul style="list-style-type: none"> <li>for gigabit Ethernet / maximum</li> </ul>	4
Number of optical interfaces	
<ul style="list-style-type: none"> <li>for network components or terminal equipment / maximum</li> </ul>	6
Range / at the optical interface / depending on the optical fiber used	2 ... 90 km
<ul style="list-style-type: none"> <li>with gigabit</li> </ul>	0.5 ... 70 km

**Interfaces / others**

Number of electrical connections	
<ul style="list-style-type: none"> <li>• for operator console</li> <li>• for management purposes</li> </ul>	1 0
Type of electrical connection	
<ul style="list-style-type: none"> <li>• for operator console</li> <li>• for power supply and signaling contact</li> </ul>	RJ45 10-pole terminal block, screwable or plugable, screw contact

### Signal-Inputs/outputs

Type of relay output	Changeover contact
Operating voltage / of the signaling contacts	
<ul style="list-style-type: none"> <li>• at AC / maximum</li> <li>• at DC / maximum</li> </ul>	250 V 125 V
Operating current / of the signaling contacts	
<ul style="list-style-type: none"> <li>• at AC / at 250 V / maximum</li> <li>• at DC / at 30 V / maximum</li> </ul>	2 A 2 A

### Supply voltage, current consumption, power loss

product options / wide range power supply	Yes
Product component / Power supply for PoE	Yes
Product feature	
<ul style="list-style-type: none"> <li>• Voltage supply for PoE from the internal 48 V supply</li> </ul>	Yes
<b>Supply voltage / 1 / Rated value</b>	24 V
<ul style="list-style-type: none"> <li>• Supply voltage / 1 / rated value</li> <li>• Type of voltage / 1 / of the supply voltage</li> <li>• Consumed current / 1 / at rated supply voltage / maximum</li> </ul>	10 ... 36 V DC 1.2 A
<b>Supply voltage / 2 / Rated value</b>	48 V
<ul style="list-style-type: none"> <li>• Supply voltage / 2 / rated value</li> <li>• Type of voltage / 2 / of the supply voltage</li> <li>• Consumed current / 2 / at rated supply voltage / maximum</li> </ul>	36 ... 59 V DC 0.6 A
<b>Supply voltage / 3 / Rated value</b>	
<ul style="list-style-type: none"> <li>• Supply voltage / 3 / rated value</li> <li>• Type of voltage / 3 / of the supply voltage</li> </ul>	88 ... 300 V DC
<b>Supply voltage / 4 / Rated value</b>	
<ul style="list-style-type: none"> <li>• Supply voltage / 4 / rated value / minimum</li> <li>• Supply voltage / 4 / rated value / maximum</li> <li>• Type of voltage / 4 / of the supply voltage</li> </ul>	85 V 264 V AC
Power loss [W]	
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	32 W

### Permitted ambient conditions

Ambient temperature	
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<ul style="list-style-type: none"> <li>during operation</li> <li>Note</li> </ul>	-40 ... +85 °C A maximum operating temperature of +85 °C is permissible for a duration of 16 hours
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 <ul style="list-style-type: none"> <li>19-inch installation</li> <li>35 mm DIN rail mounting</li> <li>wall mounting</li> </ul>	Yes Yes Yes

### Product properties, functions, components / general

Number of automatically learnable MAC addresses	8192
Storage capacity <ul style="list-style-type: none"> <li>of the MAC-address table</li> </ul>	64 Kibyte
Switch latency period	7 µs
Transfer rate / of the switch	9.2 Gbit/s
Number of priority channels	4
Product feature <ul style="list-style-type: none"> <li>no head-off-line-blocking</li> <li>Store &amp; Forward switching method</li> </ul>	Yes Yes

### Product functions / management, configuration

Product function <ul style="list-style-type: none"> <li>CLI</li> <li>web-based management</li> <li>MIB support</li> <li>RMON</li> <li>switch-managed</li> </ul>	Yes Yes Yes Yes Yes
Protocol / is supported <ul style="list-style-type: none"> <li>Telnet</li> <li>HTTP</li> </ul>	Yes Yes

• HTTPS	Yes
• TFTP	Yes
• 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

### 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 802.3af-Power-over-Ethernet	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	<a href="http://ruggedcom-selector.automation.siemens.com">http://ruggedcom-selector.automation.siemens.com</a>
• to website: Siemens RUGGEDCOM	<a href="http://siemens.com/ruggedcom">http://siemens.com/ruggedcom</a>
• to website: Selector for cables and connectors	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

#### 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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