


Technical Data

Product-type designation	RUGGEDCOM RS900NC
Product description	9-Port Managed Ethernet Switch with Fiber Optical Uplinks, 56-bit Encryption
	<p>RUGGEDCOM RS900NC IS A 9-PORT INDUSTRIALLY HARDENED, FULLY MANAGED ETHERNET SWITCH; 56-BIT ENCRYPTION; UP TO 9 PORTS: 6 BASE 10/100BAS PORTS WITH OPTION FOR 3 ADDITIO FIBER OR COPPER PORTS INDUSTRY STANDARD FIBER OPTICAL CONNECTORS: LC, SC, ST, MTRJ MULTIMODE AND SINGLEMODE OPTICAL TRANSCEIVERS LONG HAUL OPTICS ALLOW DISTANCES UP TO 90KM</p>
Transmission rate	
Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s
Interfaces	
Number of electrical/optical connections / for network components or terminal equipment / maximum	9
<ul style="list-style-type: none"> remark 	up to 9 Ports: 6 x 10/100TX ports with option for 3 additional Fiber or Copper ports
Number of electrical connections	
<ul style="list-style-type: none"> for network components or terminal equipment / maximum 	9
<ul style="list-style-type: none"> for operator console 	1
<ul style="list-style-type: none"> for management purposes 	0
Design of electrical connection	
<ul style="list-style-type: none"> for operator console 	RS232
<ul style="list-style-type: none"> for signaling contact 	3-pole terminal block, screwable
<ul style="list-style-type: none"> for power supply 	5-pole terminal block, screwable
Number of optical connections / for network components or terminal equipment / maximum	3
Range / at the optical interface / depending on the optical fiber used	2...90 km

Signal-Inputs/outputs	
Relay design	Form-C contact relay (SP CO)
type of the relay output	Changeover contact
Operating current / of signaling contacts	
<ul style="list-style-type: none"> at DC at 30 V / maximum 	1 A
Supply voltage, current consumption, power loss	
product options / wide range power supply	Yes
Type / 1 / of supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> rated value rated value 	24 V
	10...36 V
Current consumed / 1 / at rated value of supply voltage / max.	0.4 A
Type / 2 / of supply voltage	DC
Supply voltage / 2	
<ul style="list-style-type: none"> rated value rated value 	48 V
	36...72 V
Current consumed / 2 / at rated value of supply voltage / max.	0.2 A
Type / 3 / of supply voltage	DC
Supply voltage / 3	
<ul style="list-style-type: none"> rated value 	88...300 V
Type / 4 / of supply voltage	AC
Supply voltage / 4	
<ul style="list-style-type: none"> rated value 	85...264 V
Power loss	
<ul style="list-style-type: none"> maximum 	10 W
Permitted ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> during operating Comment 	-40...+85 °C
	A maximum operating temperature of +85 °C is permissible for a duration of 16 hours
Coating	Conformal Coating optional
operating condition / fanless operation	Yes
Protection class IP	IP40
Design, dimensions and weight	
Design	compact
Width	66 mm (2.6 in)
Height	188 mm (7.4 in)
Depth	127 mm (5 in)
Net weight	1.22 kg
Material / of the enclosure	20 AWG galvanized steel enclosure
Mounting type	

<ul style="list-style-type: none"> • 19-inch installation 	No
<ul style="list-style-type: none"> • 35 mm DIN rail mounting 	Yes
<ul style="list-style-type: none"> • wall mounting 	Yes
Product properties, functions, components / general	
number of automatically learnable MAC addresses	8192
switch-latency period	8 μ s
transfer rate / of the switch	1.8 Gbit/s
number of priority channels	4
product characteristic	
<ul style="list-style-type: none"> • no head-off-line-blocking 	Yes
<ul style="list-style-type: none"> • Switching-Methode Store & Forward 	Yes
Product functions / management, configuration	
Product function	
<ul style="list-style-type: none"> • CLI 	Yes
<ul style="list-style-type: none"> • web-based management 	Yes
<ul style="list-style-type: none"> • MIB support 	Yes
<ul style="list-style-type: none"> • RMON 	Yes
<ul style="list-style-type: none"> • switch-managed 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • Telnet 	Yes
<ul style="list-style-type: none"> • HTTP 	Yes
<ul style="list-style-type: none"> • HTTPS 	No
<ul style="list-style-type: none"> • TFTP 	Yes
<ul style="list-style-type: none"> • SFTP 	No
<ul style="list-style-type: none"> • IGMP (snooping/querier) 	Yes
number of groups / at IGMP	256
Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2 	No
<ul style="list-style-type: none"> • SNMP v2c 	Yes
<ul style="list-style-type: none"> • SNMP v3 	Yes
product function / for MIB-support	
<ul style="list-style-type: none"> • by BRIDGE-MIB 	RFC1493
<ul style="list-style-type: none"> • by IF-MIB 	RFC2863
<ul style="list-style-type: none"> • by RMON-MIB 	RFC2819
<ul style="list-style-type: none"> • by RSTP-MIB 	draft-ietf-bridge-bridgemib-smiv2-03-RSTP-MIB
<ul style="list-style-type: none"> • by SNMPv2-MIB 	RFC1907
<ul style="list-style-type: none"> • by SNMPv2-SMI 	RFC2578
<ul style="list-style-type: none"> • by SNMPv2-TC 	RFC2579
<ul style="list-style-type: none"> • by TCP-MIB 	RFC2012

<ul style="list-style-type: none"> • by UDP-MIB 	RFC2013
Product functions / VLAN	
Product function	
<ul style="list-style-type: none"> • VLAN - port based 	Yes
Number of VLANs / maximum	255
VLAN-Identification number	1...4094
Protocol / is supported / GVRP	Yes
Product functions / DHCP	
Product function	
<ul style="list-style-type: none"> • DHCP client 	Yes
<ul style="list-style-type: none"> • DHCP Option 82 	Yes
<ul style="list-style-type: none"> • DHCP Option 66 	No
<ul style="list-style-type: none"> • DHCP Option 67 	No
Product functions / Redundancy	
Product function	
<ul style="list-style-type: none"> • redundancy procedure STP 	Yes
<ul style="list-style-type: none"> • redundancy procedure RSTP 	Yes
<ul style="list-style-type: none"> • redundancy procedure MSTP 	Yes
<ul style="list-style-type: none"> • eRSTP 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • STP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
Product functions / Security	
product function	
<ul style="list-style-type: none"> • IEEE 802.1X (radius) 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • TACACS+ 	Yes
<ul style="list-style-type: none"> • SSH 	No
<ul style="list-style-type: none"> • SSL 	Yes
key length	
<ul style="list-style-type: none"> • at SSL 	56 bit
<ul style="list-style-type: none"> • at RSA 	1024 bit
product function / port-rate-limiting	Yes
adjustable port-rate-limitation	128 kbit/s...8 Mbit/s
Product functions / Time	
product function	
<ul style="list-style-type: none"> • SNTP-client 	Yes
<ul style="list-style-type: none"> • SNTP-server 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SNTP 	Yes
Standards, specifications, approvals	

Standard	
<ul style="list-style-type: none"> for EMC 	FCC Part 15 (Class A), EN55022 (CISPR22 Class A)
<ul style="list-style-type: none"> for safety / of CSA and UL 	cCSAus (Compliant with CSA C22.2 No. 60950, UL60950, EN60950)
Laser protection class	Complies with 21 CFR Chapter1, Subchapter J
Verification of suitability	
<ul style="list-style-type: none"> CE mark 	Yes
<ul style="list-style-type: none"> IEC 61850-3 	Yes
product conformity	
<ul style="list-style-type: none"> according to IEEE 802.3-10BaseT 	Yes
<ul style="list-style-type: none"> according to IEEE 802.3u-100BaseTX 	Yes
<ul style="list-style-type: none"> according to IEEE 802.3u-100BaseFX 	Yes
<ul style="list-style-type: none"> according to IEEE 802.3x-Flow Control 	Yes
<ul style="list-style-type: none"> according to IEEE 802.3ad-Link Aggregation 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1d-MAC Bridges 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1d-STP 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1p-class of service 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1Q-VLAN tagging 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1Q-2005 (formerly IEEE 802.1s) MSTP 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1w-RRST 	Yes
<ul style="list-style-type: none"> according to IEEE 802.1X-port based Network Access Control 	Yes
product conformity	
<ul style="list-style-type: none"> RFC768-UDP 	Yes
<ul style="list-style-type: none"> RFC783-TFTP 	Yes
<ul style="list-style-type: none"> RFC791-IP 	Yes
<ul style="list-style-type: none"> RFC792-ICMP 	Yes
<ul style="list-style-type: none"> RFC793-TCP 	Yes
<ul style="list-style-type: none"> RFC826-ARP 	Yes
<ul style="list-style-type: none"> RFC854-Telnet 	Yes
<ul style="list-style-type: none"> RFC894-IP over Ethernet 	Yes
<ul style="list-style-type: none"> RFC1112-IGMPv1 	Yes
<ul style="list-style-type: none"> RFC1519-CIDR 	Yes
<ul style="list-style-type: none"> RFC1541-DHCP (client) 	Yes
<ul style="list-style-type: none"> RFC2068-HTTP 	Yes
<ul style="list-style-type: none"> RFC2236-IGMPv2 	Yes
<ul style="list-style-type: none"> RFC2284-EAP 	Yes
<ul style="list-style-type: none"> RFC2475-Differentiated Service 	Yes
<ul style="list-style-type: none"> RFC2865-RADIUS 	Yes
<ul style="list-style-type: none"> RFC3414-SNMPv3-USM 	Yes

<ul style="list-style-type: none"> • RFC3415-SNMPv3-VACM 	Yes
Further Information / Internet Links	
Internet-Link	
<ul style="list-style-type: none"> • to website: Industry Mall/RUGGEDCOM-Selector 	http://ruggedcom-selector.automation.siemens.com
<ul style="list-style-type: none"> • to website: Industry Mall 	http://www.siemens.com/industrial-controls/mall
<ul style="list-style-type: none"> • to website: Selector for cables and connectors 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Siemens RUGGEDCOM 	http://siemens.com/ruggedcom
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/automation/net/catalog
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	http://support.automation.siemens.com
Security information	
Security information	<p>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)</p>
letzte Änderung:	Aug 9, 2014