www.ipc2u.dewww.ipc2u.comDate. 02/2014Rev.01Automation Technology > Industrial Communication > Industrial Ethernet > RUGGEDCOM EthernetSwitches > RUGGEDCOM RSG2000 managed

6GK6021-0PS2.-... RUGGEDCOMRSG2100P

Technical Data

Product-type designation	RUGGEDCOM RSG2100P
Product description	19 Port Managedt Encrypt001
Product description	19 Port Managedt Encryptuu1 THE RUGGEDCOM RSG2100P IS AN INDUSTRIALLY HARDENED, POWER OVER ETHERNET (POE) ENABLED, FULLY MANAGED, MODULAR ETHERNET SWITCH. 128-BIT ENCRYPTION; POE: 4 X 10/100BASETX 802.3AF COMPLIANT PORTS; UP TO 3-GIGABIT ETHERNET PORTS COPPER AND/OR FIBER; UP TO 16-FAST ETHERNET PORTS COPPER AND/OR FIBER; 2 PORT MODULES FOR TREMENDOUS FLEXIBILITY; NON-BLOCKING, STORE AND FORWARD SWITCHING; SUPPORTS MANY TYPES OF FIBER (MULTIMODE, SINGLEMODE) MULTIPLE CONNECTOR TYPES (ST, MTRJ, LC, SC, RJ45, MICRO-D)
Transmission rate Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s
Transfer rate / 3	1000 Mbit/s
Interfaces	
Number of electrical/optical connections / for network	19
components or terminal equipment / maximum	
• remark	10 Slots in sum: Slots 1, 2, 3, 4, 5, 7, 8, 9, 10 two Ethernet-Ports each, Slot 6 one Ethernet-Port
number of electrical/optical connections / for gigabit Ethernet / maximum	3
Number of electrical connections	
 for network components and terminal equipment 	
• maximum	16
 for gigabit Ethernet / maximum 	3
for operator console	1
 for management purposes 	0
Design of electrical connection	
for operator console	RJ45
 for power supply and signaling contact 	10-pole terminal block, screwable or plugable, screw contact
Number of optical connections / for network components or terminal equipment / maximum	12

Date. 02/2014 Rev.01

www.ipc2u.de www.ipc2u.com

Range / at the optical interface / depending on the poptical fiber used	290 km
operating distance / of optical interface / depending of used optical fiber / at gigabit	0.570 km
Signal-Inputs/outputs	
Relay design	Form-C contact relay (SP CO)
ype of the relay output	Change-over (NO/NC)
operating voltage / of the signal contact	
• at AC	
• maximum	250 V
• at DC	
• maximum	125 V
Operating current / of signaling contacts	
• at AC	
• at 250 V / maximum	2 A
• at DC	
	2 A
Supply voltage, current consumption, power	
product options / wide range power supply	Yes
product component part / power supply for PoE	Yes
product characteristic	
 voltage supply for PoE from the internal 48 V supply 	Yes
Type of voltage / 1 / of the supply voltage	DC
Supply voltage / 1	
rated value	24 V
rated value	1036 V
Current consumed / 1 / at rated value of supply /oltage / max.	1.2 A
Type of voltage / 2 / of the supply voltage	DC
Supply voltage / 2	
rated value	48 V
rated value	3659 V
Current consumed / 2 / at rated value of supply /oltage / max.	0.6 A
Type of voltage / 3 / of the supply voltage	DC
Supply voltage / 3	
rated value	88300 V
Type of voltage / 4 / of the supply voltage	AC
Supply voltage / 4	
rated value	85264 V
Powerloss	
• maximum	28 W
Permitted ambient conditions	
Ambient temperature	
during operating	-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 of display/LED panel mounted on the front or on the rear side	Yes
Design	19" rack
number of heigth rack units / related to 19 inch cabinet	1
Number of slots	10
Width	464.8 mm (18.3 in)
Height	44.2 mm (1.74 in)
Depth	315 mm (12.4 in)
Netweight	5.2 kg
Material / of the enclosure	18 AWG galvanized steel enclosure
Type of mounting	
Installation 19 inch	Yes
35 mm DIN rail mounting	Yes
wall mounting	Yes
Product properties, functions, components / general	
number of automatically learnable MAC addresses	8192
memory capacity	
of MAC-address table	64 Kibyte
 of message buffer / maximum 	2 Mibyte
switch-latency period	7 µs
transfer rate / of the switch	9.2 Gbit/s
number of priority channels	4
product characteristic	
 no head-off-line-blocking 	Yes
Switching-Methode Store & Forward	Yes
Product functions / management, configuration	
Product function	
• CLI	Yes
 web-based management 	Yes
MIB support	Yes
RMON	Yes
switch-managed	Yes
Durate and the accuracy stand	
Protocol / is supported	
Telnet	Yes
	Yes Yes
• Telnet	
TelnetHTTP	Yes
TelnetHTTPHTTPS	Yes No

www.ipc2u.de www.ipc2u.com

Date. 02/2014 Rev.01

Protocol / is supported SNMP v1 SNMP v2 SNMP v2 SNMP v2 SNMP v3 product function / for MIB-support by BRIDGE-MIB by RIDGE-MIB by RMON-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based YUAN - ldentification number Product function VLAN - port based YUAN-Identification number Product functions / DHCP Product function DHCP Option 82 DHCP Option 66	256 Yes No Yes Yes Yes RFC1493 RFC2863 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
Protocol / is supportedYSNMP v1YSNMP v2NSNMP v2cYSNMP v3Yproduct function / for MIB-supportFby BRIDGE-MIBFby RMON-MIBFby RMON-MIBFby SNMPv2-MIBFby SNMPv2-MIBFby SNMPv2-SMIFby SNMPv2-TCFby UDP-MIBFby UDP-MIBFv LAN - port basedYNumber of VLANs / maximumZVLAN - Identification number1Product functions / DHCPFProduct function1Product function1DHCP Option 82YDHCP Option 66N	Yes No Yes Yes RFC1493 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 SNMP v1 SNMP v2 SNMP v2 SNMP v3 Product function / for MIB-support by BRIDGE-MIB by IF-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB by UDP-MIB Froduct functions / VLAN Product function VLAN - port based YLAN - port based YLAN - Identification number Product functions / DHCP Product function DHCP Option 82 DHCP Option 66 	No Yes Yes RFC1493 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 SNMP v2c SNMP v3 product function / for MIB-support by BRIDGE-MIB by IF-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by TCP-MIB by TCP-MIB by UDP-MIB Froduct functions / VLAN Product function VLAN - port based Number of VLANs / maximum VLAN - Identification number Product functions / DHCP Product functions DHCP Option 82 DHCP Option 66 Number of VLAN - National Statement 	Yes Yes RFC1493 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 SNMP v2c SNMP v3 product function / for MIB-support by BRIDGE-MIB by IF-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by TCP-MIB by TCP-MIB by UDP-MIB Froduct functions / VLAN Product function VLAN - port based Number of VLANs / maximum VLAN-Identification number Product functions / DHCP Product function DHCP Client DHCP Option 82 DHCP Option 66 	Yes RFC1493 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 SNMP v3 product function / for MIB-support by BRIDGE-MIB by IF-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by TCP-MIB by TCP-MIB by UDP-MIB Froduct functions / VLAN Product function VLAN - port based YUAN-Identification number Product function DHCP Option 82 DHCP Option 66 	RFC1493 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
product function / for MIB-supportby BRIDGE-MIBby IF-MIBby RMON-MIBby RMON-MIBby RSTP-MIBby SNMPv2-MIBby SNMPv2-SMIby SNMPv2-SMIby SNMPv2-TCby TCP-MIBby UDP-MIBProduct functions / VLANProduct functionVLAN - port basedVLAN - port basedYNumber of VLANs / maximumProduct function1Product function0VLAN-Identification number1Product function1Product function1Product function0VLAN-Identification number1Product function1Product function1Product function1Product function0DHCP Option 820DHCP Option 66	RFC1493 RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 by BRIDGE-MIB by IF-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Freduct functions / VLAN Product function VLAN - port based YLAN-Identification number Product functions / DHCP Product functions DHCP Option 82 DHCP Option 66 	RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 by IF-MIB by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Froduct functions / VLAN Product function VLAN - port based YLAN-Identification number Product functions / DHCP Product function DHCP client DHCP Option 82 DHCP Option 66 	RFC2863 RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 by RMON-MIB by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based VLAN - port based VLAN-Identification number Protocol / is supported / GVRP Product function DHCP client DHCP Option 82 DHCP Option 66 	RFC2819 draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 by RSTP-MIB by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based VLAN - port based VLAN-Identification number Protocol / is supported / GVRP Product function DHCP client DHCP Option 82 DHCP Option 66 	draft-ietf-bridge-bridgemib-smiv2-03- RSTP-MIB RFC1907 RFC2578
 by SNMPv2-MIB by SNMPv2-SMI by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based VLAN - port based VLAN-Identification number Protocol / is supported / GVRP Product function DHCP client DHCP Option 82 DHCP Option 66 	RSTP-MIB RFC1907 RFC2578
 by SNMPv2-SMI by SNMPv2-TC by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based VLAN - port based VLAN-Identification number Protocol / is supported / GVRP Product function DHCP client DHCP Option 82 DHCP Option 66 	RFC2578
 by SNMPv2-TC by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based VLAN - port based Y Number of VLANs / maximum VLAN-Identification number Protocol / is supported / GVRP Product function DHCP client DHCP Option 82 DHCP Option 66 	
 by TCP-MIB by UDP-MIB Product functions / VLAN Product function VLAN - port based VLAN - port based VLAN - port based VLAN-Identification number Protocol / is supported / GVRP Product function DHCP Client DHCP Option 82 DHCP Option 66 	
 by UDP-MIB Product functions / VLAN Product function VLAN - port based Y Number of VLANs / maximum VLAN-Identification number Protocol / is supported / GVRP Product functions / DHCP Product function DHCP client DHCP Option 82 DHCP Option 66 	RFC2579
Product functions / VLANProduct function• VLAN - port basedYNumber of VLANs / maximumZVLAN-Identification number1Protocol / is supported / GVRPYProduct functions / DHCPProduct function• DHCP clientY• DHCP Option 82• DHCP Option 66	RFC2012
Product functionI• VLAN - port basedYNumber of VLANs / maximum2VLAN-Identification number1Protocol / is supported / GVRPYProduct functions / DHCPY• DHCP clientY• DHCP Option 82Y• DHCP Option 66N	RFC2013
 VLAN - port based Number of VLANs / maximum VLAN-Identification number Protocol / is supported / GVRP Product functions / DHCP Product function DHCP client DHCP Option 82 DHCP Option 66 	
Number of VLANs / maximum 2 VLAN-Identification number 1 Protocol / is supported / GVRP Y Product functions / DHCP Y Product function Y • DHCP client Y • DHCP Option 82 Y • DHCP Option 66 N	
VLAN-Identification number1Protocol / is supported / GVRPYProduct functions / DHCPYProduct functionY• DHCP clientY• DHCP Option 82Y• DHCP Option 66N	Yes
Protocol / is supported / GVRP Y Product functions / DHCP Product function • DHCP client Y • DHCP Option 82 Y • DHCP Option 66 N	255
Product functions / DHCPProduct function• DHCP client• DHCP Option 82• DHCP Option 66	14094
Product functionI• DHCP clientY• DHCP Option 82Y• DHCP Option 66N	Yes
 DHCP client DHCP Option 82 DHCP Option 66 	
DHCP Option 82 DHCP Option 66	
DHCP Option 66	Yes
	Yes
DUOD Outland 07	No
DHCP Option 67	No
Product functions / Redundancy	
Product function	
redundancy procedure STP Y	Yes
RSTP redundancy protocol Y	Yes
redundancy procedure MSTP Y	Yes
• eRSTP Y	Yes
Protocol / is supported	
• STP Y	Yes
• RSTP Y	Yes
• MSTP Y	Yes
Product functions / Security	
product function	
-	Yes
protocol / is supported	
	Yes
	Yes
- 0011 1	

www.ipc2u.de www.ipc2u.com Date. 02/2014 Rev.01

• SSL	Yes
keylength	
• at SSL	128 bit
at 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 / 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	
CE mark	Yes
• IEC 61850-3	Yes
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 802.3x-Flow Control 	Yes
 according to IEEE 802.3ab-1000BaseT 	Yes
 according to IEEE 802.3ad-Link Aggregation 	Yes
 according to IEEE 802.3af-Power-over- Ethernet 	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
product conformity	
RFC768-UDP	Yes
RFC783-TFTP	Yes
• RFC791-IP	Yes
RFC792-ICMP	Yes
• RFC793-TCP	Yes
RFC826-ARP	Yes
	ate 02/2014 Rev 01

www.ipc2u.de www.ipc2u.com

Date. 02/2014 Rev.01

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
 Siemens RUGGEDCOM 	http://siemens.com/ruggedcom
Industry Mall	http://www.siemens.com/industrial- controls/mall
 selection instrument cables and connectors 	http://www.siemens.com/snst
CAx-Download-Manager	http://www.siemens.com/cax
 industrial communication 	http://www.siemens.com/simatic-net
 Information und Download Center 	http://www.siemens.com/automation/net/catalog
image database	http://automation.siemens.com/bilddb
Industry Online Support	http://support.automation.siemens.com
letzte Änderung:	Feb 24, 2014

© Siemens AG 2014 - Corporate Information - Privacy Policy - Terms of Use

www.ipc2u.de www.ipc2u.com Date. 02/2014 Rev.01