

6GK6015-0BM2-.... RUGGEDCOM RX1501


Technical Data

Product-type designation RUGGEDCOM RX1501

Product description

Utility Grade Layer 2 and Router

THE RUGGEDCOM RX1501 SERIES IS A UTILITY GRADE LAYER 2 AND LAYER 3 SWITCH AND ROUTER. 1 X POWER SUPPLY FIELD REPLACEABLE LINE MODULES UP TO 36-PORTS 100FX; UP TO 36-PORTS 10/100TX; UP TO 4-PORTS GIGABIT ETHERNET UP TO 18 PORTS 10FL / 100SX SC, ST, LC AND MTRJ PLUGGABLE OPTICS (SFP) UP TO 4 T1/E1 PORTS CELLULAR (EVDO / HSPA)* DDS (56K MASTER/SLAVE, 64K SLAVE) UP TO 24 RS232/422/485



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 components or terminal equipment / maximum	36
<ul style="list-style-type: none"> remark 	up to 36 x 10/100TX Ports
number of electrical/optical connections / for gigabit Ethernet / maximum	4
Number of electrical connections	
<ul style="list-style-type: none"> for network components and terminal equipment 	
<ul style="list-style-type: none"> maximum 	36
<ul style="list-style-type: none"> for gigabit Ethernet / maximum 	4
<ul style="list-style-type: none"> for serial interfaces / in accordance with RS 232/RS 422/RS 485 / maximum 	36
<ul style="list-style-type: none"> for operator console 	1
<ul style="list-style-type: none"> for management purposes 	1
Design of electrical connection	
<ul style="list-style-type: none"> for operator console 	RS232
<ul style="list-style-type: none"> for management purposes 	RJ45
<ul style="list-style-type: none"> for power supply 	6-pole terminal block, permanently installed, screw contact

Number of optical connections / for network components or terminal equipment / maximum	36
Range / at the optical interface / depending on the optical fiber used	2...90 km
operating distance / of optical interface / depending of used optical fiber / at gigabit	0.5...70 km
Signal-Inputs/outputs	
type of the relay output	Change-over (NO/NC)
operating voltage / of the signal contact	
<ul style="list-style-type: none"> at AC maximum 	250 V
<ul style="list-style-type: none"> at DC maximum 	125 V
Operating current / of signaling contacts	
<ul style="list-style-type: none"> at AC at 250 V / maximum 	8 A
<ul style="list-style-type: none"> at DC at 30 V / maximum 	5 A
Supply voltage, current consumption, power loss	
product options / wide range power supply product characteristic	Yes
<ul style="list-style-type: none"> voltage supply modular 	Yes
Type of voltage / 1 / of the supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> rated value rated value 	24 V 15...36 V
Type of voltage / 2 / of the supply voltage	DC
Supply voltage / 2	
<ul style="list-style-type: none"> rated value rated value 	48 V 36...72 V
Type of voltage / 3 / of the supply voltage	DC
Supply voltage / 3	
<ul style="list-style-type: none"> rated value 	88...300 V
Type of voltage / 4 / of the 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 	50 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	19" rack
number of height rack units / related to 19 inch cabinet	1
Number of slots	6
Width	440.944 mm (17.36 in)
Height	44.2 mm (1.74 in)
Depth	302.26 mm (11.9 in)
Net weight	5.13 kg
<ul style="list-style-type: none"> Comment 	Weight is depending on the built in modules
Material / of the enclosure	Aluminum
Type of mounting	
<ul style="list-style-type: none"> Installation 19 inch 	Yes
<ul style="list-style-type: none"> 35 mm DIN rail mounting 	No
<ul style="list-style-type: none"> wall mounting 	Yes
Product properties, functions, components / general	
product function	
<ul style="list-style-type: none"> RAW socket mode for any serial protocols 	Yes
number of automatically learnable MAC addresses	8192
memory capacity	
<ul style="list-style-type: none"> of MAC-address table 	64 Kibyte
<ul style="list-style-type: none"> of message buffer / maximum 	1 Mibyte
switch-latency period	7 μ s
transfer rate / of the switch	10 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-Method Store & Forward 	Yes
protocol / is supported / Generic Object Oriented Substation Events (GOOSE)	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 	Yes
<ul style="list-style-type: none"> TFTP 	Yes
<ul style="list-style-type: none"> NETCONF 	Yes
<ul style="list-style-type: none"> 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 / Diagnosis	
Product function	
• loopback diagnostics	Yes
• real time line traces with/without decoding	Yes
Product functions / VLAN	
Product function	
• VLAN - port based	Yes
Number of VLANs / maximum	255
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 / Routing	
Product function	
• dynamic IP routing	Yes
protocol / is supported	
• RIP v1	Yes
• RIPv2	Yes
• OSPFv2	Yes
• VRRP	Yes
• BGP	Yes
Product functions / Redundancy	
Product function	
• redundancy procedure STP	Yes
• RSTP redundancy protocol	Yes
• redundancy procedure MSTP	Yes

<ul style="list-style-type: none"> eRSTP 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> STP RSTP MSTP 	Yes Yes Yes
Product functions / Security	
product function	
<ul style="list-style-type: none"> ACL - MAC-based IEEE 802.1x (radius) Broadcast/Multicast/Unicast Limiter blocking of communication via physical ports 	Yes Yes Yes Yes
protocol / is supported	
<ul style="list-style-type: none"> SSH 	Yes
product function / port-rate-limiting	Yes
Product functions / Time	
product function	
<ul style="list-style-type: none"> SNTP-client SNTP-server 	Yes Yes
Protocol / is supported	
<ul style="list-style-type: none"> SNTP 	Yes
Standards, specifications, approvals	
Standard	
<ul style="list-style-type: none"> for EMC for safety / of CSA and UL 	FCC Part 15 (Class A), EN55022 (CISPR22 Class A) 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 IEC 61850-3 	Yes Yes
product conformity	
<ul style="list-style-type: none"> according to IEEE 802.3-10BaseT according to IEEE 802.3u-100BaseTX according to IEEE 802.3u-100BaseFX according to IEEE 802.3x-Flow Control according to IEEE 802.3ab-1000BaseT according to IEEE 802.3ad-Link Aggregation according to IEEE 802.1d-MAC Bridges according to IEEE 802.1d-STP according to IEEE 802.1Q-VLAN tagging according to IEEE 802.1Q-2005 (formerly IEEE 802.1s) MSTP according to IEEE 802.1w-RRST according to IEEE 802.1x-port based Network Access Control 	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes
product conformity	

• 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
• RFC1294-Frame Relay	Yes
• RFC1321-PPP (MD5)	Yes
• RFC1332-PPP (IPCP)	Yes
• RFC1334-PPP Authentication	Yes
• RFC1490-Frame Relay	Yes
• RFC1519-CIDR	Yes
• RFC1541-DHCP (client)	Yes
• RFC1661-PPP	Yes
• RFC2030-SNTP	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:

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