

6GK6015-1AM2-.... RUGGEDCOM RX1510

Technical Data

Product-type designation RUGGEDCOM RX1510

Product description

Utility Grade Layer 2 and Router

THE RUGGEDCOM RX1510 SERIES IS A UTILITY GRADE LAYER 2 AND LAYER 3 SWITCH AND ROUTER IN A COMPACT FORM FACTOR. 2 X POWER SUPPLIES REDUNDANT LOAD SHARING POWER SUPPLIES FIELD REPLACEABLE LINE MODULES UP TO 24 10/100BASETX, UP TO 8 GIGABIT PORTS UP TO 24 100BASEFX PORTS UP TO 12 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	24
number of electrical/optical connections / for gigabit Ethernet / maximum	8
Number of electrical connections	
<ul style="list-style-type: none"> for network components and terminal equipment maximum 	24
<ul style="list-style-type: none"> for gigabit Ethernet / maximum 	8
<ul style="list-style-type: none"> for serial interfaces / in accordance with RS 232/RS 422/RS 485 / maximum 	24
<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 	RJ45
<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	24

components or terminal equipment / maximum	
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	Yes
product characteristic	
<ul style="list-style-type: none"> voltage supply modular 	Yes
<ul style="list-style-type: none"> voltage supply hot-swappable 	Yes
Type of voltage / 1 / of the supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> rated value 	24 V
<ul style="list-style-type: none"> rated value 	15...36 V
Type of voltage / 2 / of the supply voltage	DC
Supply voltage / 2	
<ul style="list-style-type: none"> rated value 	48 V
<ul style="list-style-type: none"> rated value 	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
Permitted ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> during operating 	-40...+85 °C
<ul style="list-style-type: none"> Comment 	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
Number of slots	4
Width	()
Height	()
Depth	()
Net weight	
<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 	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	
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	
<ul style="list-style-type: none"> 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	
• remote-SysLog	Yes
• 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
• 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
• Broadcast/Multicast/Unicast Limiter	Yes
• blocking of communication via physical ports	Yes
protocol / is supported	
• SSH	Yes
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 802.1d-MAC Bridges	Yes
• according to IEEE 802.1d-STP	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

