

**6GK6050-0RM2-.... RUGGEDCOM MX5000RE**

Technical Data

**Product-type designation**

**RUGGEDCOM MX5000RE**

RUGGEDCOM MX5000RE IS A RUGGEDENCLOSURE LOADED WITH A RUGGEDCOM MX5000.



**Transmission rate**

Transfer rate / 1	10 Mbit/s
Transfer rate / 2	100 Mbit/s
Transfer rate / 3	1000 Mbit/s
Transfer rate / 4	10 Gbit/s

**Interfaces**

Number of electrical/optical connections / for network components or terminal equipment / maximum	50
<ul style="list-style-type: none"> <li>remark</li> </ul>	48 ports with line modules + 2 ports in the switch module
number of electrical/optical connections / for gigabit Ethernet / maximum	26
Number of electrical connections	
<ul style="list-style-type: none"> <li>for network components and terminal equipment</li> </ul>	
<ul style="list-style-type: none"> <li>maximum</li> </ul>	48
<ul style="list-style-type: none"> <li>for gigabit Ethernet / maximum</li> </ul>	24
<ul style="list-style-type: none"> <li>for serial interfaces / in accordance with RS 232/RS 422/RS 485 / maximum</li> </ul>	48
<ul style="list-style-type: none"> <li>for operator console</li> </ul>	1
<ul style="list-style-type: none"> <li>for management purposes</li> </ul>	1
Design of electrical connection	
<ul style="list-style-type: none"> <li>for operator console</li> </ul>	RS232
<ul style="list-style-type: none"> <li>for management purposes</li> </ul>	RJ45
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	3-pole terminal block, permanently

	installed
Number of optical connections / for network components or terminal equipment / maximum	48
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...25 km
<b>Signal-Inputs/outputs</b>	
type of the relay output	Change-over (NO/NC)
operating voltage / of the signal contact	
<ul style="list-style-type: none"> <li>at AC</li> <li>maximum</li> </ul>	250 V
<ul style="list-style-type: none"> <li>at DC</li> <li>maximum</li> </ul>	125 V
Operating current / of signaling contacts	
<ul style="list-style-type: none"> <li>at AC</li> <li>at 250 V / maximum</li> </ul>	2 A
<ul style="list-style-type: none"> <li>at DC</li> <li>at 30 V / maximum</li> </ul>	2 A
<b>Supply voltage, current consumption, power loss</b>	
product options / wide range power supply product characteristic	Yes
<ul style="list-style-type: none"> <li>voltage supply modular</li> </ul>	Yes
<ul style="list-style-type: none"> <li>voltage supply hot-swappable</li> </ul>	Yes
<b>Type of voltage / 3 / of the supply voltage</b>	DC
Supply voltage / 3	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	88...300 V
<b>Type of voltage / 4 / of the supply voltage</b>	AC
Supply voltage / 4	
<ul style="list-style-type: none"> <li>rated value</li> </ul>	85...264 V
<b>Permitted ambient conditions</b>	
Ambient temperature	
<ul style="list-style-type: none"> <li>during operating</li> </ul>	-40...+85 °C
<ul style="list-style-type: none"> <li>Comment</li> </ul>	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
<b>Design, dimensions and weight</b>	
Design	19" rack
Number of slots	6
Width	454.66 mm ( 17.9 in )
Height	175.26 mm ( 6.9 in )
Depth	302.006 mm ( 11.89 in )
Net weight	
<ul style="list-style-type: none"> <li>Comment</li> </ul>	Weight is depending on the built in

	modules
Material / of the enclosure	18 AWG galvanized steel enclosure
Type of mounting	
• Installation 19 inch	Yes
• 35 mm DIN rail mounting	No
• wall mounting	Yes
<b>Product properties, functions, components / general</b>	
product function	
• RAW socket mode for any serial protocols	Yes
number of automatically learnable MAC addresses	98304
memory capacity	
• of MAC-address table	64 Kibyte
• of message buffer / maximum	2 Mibyte
switch-latency period	10.5 µs
transfer rate / of the switch	88 Gbit/s
number of priority channels	4
product characteristic	
• no head-off-line-blocking	Yes
• Switching-Methode Store & Forward	Yes
<b>Product functions / management, configuration</b>	
Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• RMON	No
• switch-managed	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	No
• TFTP	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
	RFC1907

• by SNMPv2-MIB	
• by SNMPv2-SMI	RFC2578
• by SNMPv2-TC	RFC2579
• by TCP-MIB	RFC2012
• by UDP-MIB	RFC2013
<b>Product functions / VLAN</b>	
Product function	
• VLAN - port based	No
Number of VLANs / maximum	255
VLAN-Identification number	1...4094
Protocol / is supported / GVRP	No
<b>Product functions / DHCP</b>	
Product function	
• DHCP client	Yes
• DHCP Option 82	No
• DHCP Option 66	No
• DHCP Option 67	No
<b>Product functions / Routing</b>	
Product function	
• dynamic IP routing	Yes
protocol / is supported	
• RIP v1	Yes
• RIPv2	Yes
• OSPFv2	Yes
• VRRP	No
• BGP	Yes
<b>Product functions / Redundancy</b>	
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
<b>Product functions / Security</b>	
product function	
• ACL - MAC-based	Yes
• ACL-Role based	Yes
• IEEE 802.1x (radius)	Yes
• blocking of communication via physical ports	Yes
protocol / is supported	
• SSH	Yes
product function / port-rate-limiting	Yes
<b>Product functions / Time</b>	

Protocol / is supported	
• SNTP	Yes
Type of time synchronization	NTP
<b>Standards, specifications, approvals</b>	
Standard	
• for EMC	FCC Part 15 (Class A), EN55022 (CISPR22 Class A)
• for safety / of CSA and UL	cTUVus (Compliant to UL 60950-1:2007, CAN/CSA-C22.2 No. 60950-1-07, EN 60950-1:2006)
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 802.1p-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	
• according to MIL-STD 167-Vibration	Yes
• according to MIL-STD 461-EMI	Yes
• according to MIL-STD 810-Temperature and Humidity	Yes
• according to MIL-S 901D-Shock (Hard Mounted)	Yes
• according to MIL-STD 1399 Magnetic Field (DC Magnetic Exposure)	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
- RFC1112-IGMPv1
- RFC1519-CIDR
- RFC1541-DHCP (client)
- RFC2030-SNTP
- RFC2068-HTTP
- RFC2236-IGMPv2
- RFC2475-Differentiated Service

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes

#### Further Information / Internet Links

##### Internet link

- to website
  - Industry Mall/RUGGEDCOM Selector
  - Siemens RUGGEDCOM
  - Industry Mall
  - selection instrument cables and connectors
  - CAx-Download-Manager
  - industrial communication
  - Information und Download Center
  - image database
  - Industry Online Support
- <http://ruggedcom-selector.automation.siemens.com>
- <http://siemens.com/ruggedcom>
- <http://www.siemens.com/industrial-controls/mall>
- <http://www.siemens.com/snst>
- <http://www.siemens.com/cax>
- <http://www.siemens.com/simatic-net>
- <http://www.siemens.com/automation/net/catalog>
- <http://automation.siemens.com/bilddb>
- <http://support.automation.siemens.com>

**letzte Änderung:**

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