SIEMENS

Data sheet   **6GK5875-0AA10-1AA2**

Product type designation

SCALANCE M875 UMTS ROUTER
SCALANCE M875-0 UMTS router; for wireless IP communication from Ethernet- based automation devices via UMTS mobile radio HSDPA and HSUPA support Security features: IPsec, Firewall; for mobile applications with approvals for railway and vehicels; 1x digital input, 1x digital output; observe national approvals!

Transmission rate

Transfer rate	10 Mbit/s, 100 Mbit/s
Transfer rate	
• for GSM transmission	9600 bit/s
• for GPRS transmission / with downlink / maximum	85.6 kbit/s
• for GPRS transmission / with uplink / maximum	42.8 kbit/s
• with eGPRS transmission / with downlink / maximum	236.8 kbit/s
• with eGPRS transmission / with uplink / maximum	118 kbit/s
• with UMTS transmission / with downlink / maximum	14.4 Mbit/s
• with UMTS transmission / with uplink / maximum	5.76 Mbit/s

Interfaces

Number of electrical connections	
• for internal network	2

● for external network	2
Number of electrical connections	
● for power supply	1
Type of electrical connection	
● for internal network	RJ45 port (10/100 Mbit/s, TP, autocrossover)
● for external network	SMA antenna socket (50 ohms)
● for power supply	Terminal strip

WAN connection	
Type of mobile network / is supported	GSM, UMTS
Type of mobile wireless service / is supported	GPRS, eGPRS, HSPA+
Operating frequency / for GSM transmission	850 MHz, 900 MHz, 1800 MHz, 1900 MHz
Operating frequency / with UMTS transmission	800 MHz, 850 MHz, 900 MHz, 1900 MHz, 2100 MHz

Supply voltage, current consumption, power loss	
Supply voltage / Rated value	24 V
Supply voltage / rated value	12 ... 30
Type of voltage / of the supply voltage	DC
Consumed current / at rated supply voltage / maximum	450 mA
Power loss [W]	
● typical	4 W

Permitted ambient conditions	
Ambient temperature	
● during operation	-40 ... +75 °C
● during storage	-40 ... +85 °C
Relative humidity / at 25 °C / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight	
Design	compact
Depth	114 mm
Width	45 mm
Net weight	280 g
Mounting type	
● 35 mm DIN rail mounting	Yes
● S7-300 rail mounting	No
● S7-1500 rail mounting	No
● wall mounting	No

Product properties, functions, components / general	
Product function	
● DynDNS-Client	Yes

Product functions / management, configuration

Product function	
• CLI	No
• web-based management	Yes
• MIB support	No
• TRAPs via email	No
Protocol / is supported	
• Telnet	No
• HTTP	No
• HTTPS	Yes
Type of configuration	Web-based management

Product functions / Diagnosis

Product function	
• Statistics Packet Size	No
• Statistics packet type	No
• Error statistics	No
• SysLog	Yes
• Packet Filter Log	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP server - internal network	Yes

Product functions / Routing

Router function	
• NAT (IP masquerading)	Yes
• Port forwarding	Yes
• NAT traversal	Yes
• 1:1 NAT	Yes
• DNS cache	Yes

Product functions / Security

Suitability for operation / Virtual Private Network	Yes
Firewall version	Statefull Inspection
Product function	
• Password protection	Yes
• packet filter	Yes
• Broadcast/Multicast/Unicast Limiter	No
Product function	
• broadcast blocking	No
• with VPN connection	IPSec

Number of possible connections / with VPN connection	10
Type of authentication / with Virtual Private Network / PSK	Yes
Protocol / is supported	
• IPsec tunnel and transport mode	Yes
Key length	
• with IPsec DES / with Virtual Private Network	56 bit
• 1 / with IPsec AES / with Virtual Private Network	128 bit
• 2 / with IPsec AES / with Virtual Private Network	192 bit
• 3 / with IPsec AES / with Virtual Private Network	256 bit
• with IPsec 3DES / with Virtual Private Network	168 bit
Type of Internet key exchange / with Virtual Private Network	
• main mode	Yes
• quick mode	Yes
Type of packet authentication / with Virtual Private Network	MD5, SHA-1
IETF profile / with Virtual Private Network / X.509v3 certificate	Yes

Product functions / Time

Protocol / is supported	
• NTP	Yes

Standards, specifications, approvals

Standard	
• for safety / from CSA and UL	yes
• for emitted interference	EN55022 Class A
• for interference immunity	EN 61000-6-2
Certificate of suitability	EN 61000-6-2
• CE marking	Yes
• E1 approval	No
• E1 approval	No
• Railway application in accordance with EN 50121-3-2	Yes
• Railway application in accordance with EN 50155	Yes; no coated printed circuit boards
• railway application in accordance with EN 61373	Yes; cat. 1, cl. B

Further Information / Internet Links

Internet-Link	

• to website: Selector for cables and connectors	http://www.siemens.com/snst
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst
• to website: Industrial communication	http://www.siemens.com/simatic-net
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

Security information

Security information	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)
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