

Product type designation

SCALANCE M876-3 3G

SCALANCE M876-3 3G router; for the wireless IP communication of Ethernet-based Programmable controllers via 3G mobile radio HSPA+/EV-DO, VPN, Firewall, NAT 4-port switch; Antenna diversity; 1x digital input, 1x digital output; observe national approvals! Observe provider's approvals!



Transmission rate	
Transfer rate	10 Mbit/s, 100 Mbit/s
Transfer rate	
<ul style="list-style-type: none"> • for GPRS transmission / with downlink / maximum 	85.6 kbit/s
<ul style="list-style-type: none"> • for GPRS transmission / with uplink / maximum 	85.6 kbit/s
<ul style="list-style-type: none"> • with eGPRS transmission / with downlink / maximum 	236.8 kbit/s
<ul style="list-style-type: none"> • with eGPRS transmission / with uplink / maximum 	236.8 kbit/s
<ul style="list-style-type: none"> • with UMTS transmission / with downlink / maximum 	14.4 Mbit/s
<ul style="list-style-type: none"> • with UMTS transmission / with uplink / maximum 	5.76 Mbit/s
<ul style="list-style-type: none"> • for EV-DO transmission / for forward link / maximum 	3.1 Mbit/s
<ul style="list-style-type: none"> • for EV-DO transmission / for reverse link / maximum 	1.8 Mbit/s

Interfaces	
Number of electrical connections	
<ul style="list-style-type: none"> • for internal network • for external network 	4 2
Number of electrical connections	
<ul style="list-style-type: none"> • for power supply 	2
Type of electrical connection	
<ul style="list-style-type: none"> • for internal network • for external network • for power supply 	RJ45 port (10/100 Mbit/s, TP, autocrossover) SMA antenna socket (50 ohms) Terminal strip

Signal-Inputs/outputs	
Number of electrical connections	
<ul style="list-style-type: none"> • for digital input signals • for digital output signals 	1 1
Type of electrical connection	
<ul style="list-style-type: none"> • for digital input signals • for digital output signals 	Terminal block Terminal block

WAN connection	
Type of mobile network / is supported	GSM, UMTS, CDMA, EV-DO
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
Operating frequency / for CDMA2000 transmission	800 MHz, 1900 MHz

Supply voltage, current consumption, power loss	
Supply voltage / Rated value	24 V
Supply voltage / rated value	10.8 ... 28.8
Type of voltage / of the supply voltage	DC
Consumed current / at rated supply voltage / maximum	330 mA
Power loss [W]	
<ul style="list-style-type: none"> • maximum 	8 W

Permitted ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	-20 ... +60 °C -40 ... +85 °C
Relative humidity / at 25 °C / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weight	
Design	compact
Depth	127 mm

Height	147 mm
Width	35 mm
Mounting type	
<ul style="list-style-type: none"> • 35 mm DIN rail mounting 	Yes
<ul style="list-style-type: none"> • S7-300 rail mounting 	Yes
<ul style="list-style-type: none"> • S7-1500 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"> • DynDNS-Client 	Yes
<ul style="list-style-type: none"> • no-ip.com client 	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"> • TRAPs via email 	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
Type of configuration	Web-based management

Product functions / Diagnosis

Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2 	Yes
<ul style="list-style-type: none"> • SNMP v2c 	Yes
<ul style="list-style-type: none"> • SNMP v3 	Yes
Product function	
<ul style="list-style-type: none"> • Statistics Packet Size 	No
<ul style="list-style-type: none"> • Statistics packet type 	No
<ul style="list-style-type: none"> • Error statistics 	No
<ul style="list-style-type: none"> • SysLog 	Yes
<ul style="list-style-type: none"> • Packet Filter Log 	Yes

Product functions / DHCP

Product function	
<ul style="list-style-type: none"> • DHCP client 	Yes
<ul style="list-style-type: none"> • DHCP server - internal network 	Yes

Product functions / Routing

Router function	
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• 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, OpenVPN (as Client)
Number of possible connections / with VPN connection	20
Type of authentication / with Virtual Private Network / PSK	Yes
Protocol / is supported	
• IPsec tunnel and transport mode	Yes
Key length	
• 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, SHA-256, SHA-384, SHA-512
IETF profile / with Virtual Private Network / X.509v3 certificate	Yes

Product functions / Time

Protocol / is supported	
• NTP	Yes
• SNTP	Yes

Standards, specifications, approvals

Standard	<ul style="list-style-type: none"> • for EMC • for FM • for hazardous zone • for safety / from CSA and UL • for hazardous zone / from CSA and UL • for emitted interference • for interference immunity 	<p>ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-2, EN 61000-6-4</p> <p>FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4</p> <p>EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X</p> <p>UL 60950-1, CAN/CSA C22.2 No. 60950-1-07, UL E115352 Vol. X2</p> <p>ANSI/ISA 12.12.01-2013, CAN/CSA C22.2 No.213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC</p> <p>ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-4</p> <p>ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-2</p>
Certificate of suitability	<ul style="list-style-type: none"> • CE marking 	Yes

Further Information / Internet Links

Internet-Link	<ul style="list-style-type: none"> • to website: Selector for cables and connectors • to website: Selector SIMATIC NET SELECTION TOOL • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx Download Manager • to website: Industry Online Support 	<p>http://www.siemens.com/snst</p> <p>http://www.siemens.com/snst</p> <p>http://www.siemens.com/simatic-net</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
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Security information

Security information	<p>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)</p>
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