SIEMENS

SCALANCE M876-4 LTE (4G) NAM; for wireless IP communication from Ethernet- based automation devices via LTE (4G) mobile radio, optimized for use in North America, VPN, Firewall, NAT; 4-port switch; 2x SMA antennas, MIMO Technology; 1x digital input, 1x digital output; observe national approvals!

Transfer rate	
Transfer rate	10 Mbit/s, 100 Mbit/s
Transfer rate	
• for GPRS transmission / with downlink / maximum	85.6 kbit/s
• for GPRS transmission / with uplink / maximum	85.6 kbit/s
• with eGPRS transmission / with downlink / maximum	236.8 kbit/s
• with eGPRS transmission / with uplink / maximum	236.8 kbit/s
• with UMTS transmission / with downlink / maximum	14.4 Mbit/s
• with UMTS transmission / with uplink / maximum	5.76 Mbit/s
• for LTE transmission / with downlink / maximum	100 Mbit/s
• for LTE transmission / with uplink / maximum	50 Mbit/s

Interfaces	
Number of electrical connections	
• for internal network	4

05/13/2020

• for external network	2
Number of electrical connections	
• for power supply	2
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

Signal inputs/outputs

Number of electrical connections	
• for digital input signals	1
• for digital output signals	1
Type of electrical connection	
• for digital input signals	Terminal block
• for digital output signals	Terminal block

WAN connection

Type of mobile network / is supported	GSM, UMTS, LTE
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	850 MHz, AWS-1 (1700/2100) MHz, 1900 MHz
Operating frequency / for LTE transmission	700 MHz, 850 MHz, AWS-1 (1700/2100) 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]	
• maximum	8 W

Ambient conditions

Ambient temperature	
• during operation	-20 ... +70 °C
• during storage	-40 ... +85 °C
Relative humidity / at 25 °C / during operation / maximum	95 %
Protection class IP	IP20

Design, dimensions and weights

Design	compact
Depth	127 mm
Height	147 mm
Width	35 mm
Mounting type	

• 35 mm DIN rail mounting	Yes
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• wall mounting	Yes

Product features, product functions, product components / general

Product function	
• DynDNS client	Yes
• no-ip.com client	Yes

Product functions / management, configuration, engineering

Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
Type of configuration	Web-based management

Product functions / Diagnostics

Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v2c	Yes
• SNMP v3	Yes
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, 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	
• for EMC	FCC CFR 47, Part 15, Subpart B

● for FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
● for safety / from CSA and UL	UL 60950-1, CAN/CSA C22.2 No. 60950-1-07, UL E115352 Vol. X2
● for hazardous zone / from CSA and UL	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

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)

last modified: 05/12/2020