

SCALANCE M876-4 4G router; for the wireless IP communication from Ethernet-based Programmable controllers via LTE (4G) mobile radio optimized for use in Europe, 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	
<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 LTE transmission / with downlink / maximum 	100 Mbit/s
<ul style="list-style-type: none"> • for LTE transmission / with uplink / maximum 	50 Mbit/s
Interfaces	
Number of electrical connections	
<ul style="list-style-type: none"> • for internal network 	4

<ul style="list-style-type: none"> • for external network 	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, LTE
Type of mobile wireless service / is supported	GPRS, eGPRS, HSPA+
Operating frequency / for GSM transmission	900 MHz, 1800 MHz
Operating frequency / with UMTS transmission	900 MHz, 1800 MHz, 2100 MHz
Operating frequency / for LTE transmission	800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2600 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

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	-20 ... +70 °C -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
- S7-300 rail mounting
- S7-1500 rail mounting
- wall mounting

Yes
Yes
Yes
Yes

Product features, product functions, product components / general

Product function

- DynDNS client
- no-ip.com client

Yes
Yes

Product functions / management, configuration, engineering

Product function

- CLI
- web-based management
- MIB support
- TRAPs via email

Yes
Yes
Yes
Yes

Protocol / is supported

- Telnet
- HTTP
- HTTPS

Yes
Yes
Yes

Type of configuration

Web-based management

Product functions / Diagnostics

Protocol / is supported

- SNMP v1
- SNMP v2
- SNMP v2c
- SNMP v3

Yes
Yes
Yes
Yes

Product function

- Statistics Packet Size
- Statistics packet type
- Error statistics
- SysLog
- Packet Filter Log

No
No
No
Yes
Yes

Product functions / DHCP

Product function

- DHCP client
- DHCP server - internal network

Yes
Yes

Product functions / Routing

Router function

- NAT (IP masquerading)
- Port forwarding
- NAT traversal

Yes
Yes
Yes

- 1:1 NAT
- DNS cache

Yes

Yes

Product functions / Security

Suitability for operation / Virtual Private Network	Yes
Firewall version	Statefull Inspection
Product function	
<ul style="list-style-type: none"> • Password protection 	Yes
<ul style="list-style-type: none"> • packet filter 	Yes
<ul style="list-style-type: none"> • Broadcast/Multicast/Unicast Limiter 	No
Product function	
<ul style="list-style-type: none"> • broadcast blocking 	No
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • IPsec tunnel and transport mode 	Yes
Key length	
<ul style="list-style-type: none"> • 1 / with IPsec AES / with Virtual Private Network 	128 bit
<ul style="list-style-type: none"> • 2 / with IPsec AES / with Virtual Private Network 	192 bit
<ul style="list-style-type: none"> • 3 / with IPsec AES / with Virtual Private Network 	256 bit
<ul style="list-style-type: none"> • with IPsec 3DES / with Virtual Private Network 	168 bit
Type of Internet key exchange / with Virtual Private Network	
<ul style="list-style-type: none"> • main mode 	Yes
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes

Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> • for EMC 	ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-2, EN 61000-6-4

- for hazardous zone
- for emitted interference
- for interference immunity

EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X
 ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-4
 ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-2

Certificate of suitability

- CE marking
- Railway application in accordance with EN 50121-3-2
- Railway application in accordance with EN 50121-4
- Railway application in accordance with EN 50155
- railway application in accordance with EN 61373
- Fire protection in accordance with EN 45545-2

Yes
 Yes
 Yes
 Yes; no coated printed circuit boards
 Yes; cat. 1, cl.A and cl. B
 Yes

Further information / Internet-Links

Internet-Link

- 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

<http://www.siemens.com/snst>
<http://www.siemens.com/snst>
<http://www.siemens.com/simatic-net>
<https://mall.industry.siemens.com>
<http://www.siemens.com/industry/infocenter>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<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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