

### product type designation



### M876-4 LTE (EU)

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"> <li>for GPRS transmission / with downlink / maximum</li> </ul>	85.6 kbit/s
<ul style="list-style-type: none"> <li>for GPRS transmission / with uplink / maximum</li> </ul>	85.6 kbit/s
<ul style="list-style-type: none"> <li>with eGPRS transmission / with downlink / maximum</li> </ul>	236.8 kbit/s
<ul style="list-style-type: none"> <li>with eGPRS transmission / with uplink / maximum</li> </ul>	236.8 kbit/s
<ul style="list-style-type: none"> <li>with UMTS transmission / with downlink / maximum</li> </ul>	14.4 Mbit/s
<ul style="list-style-type: none"> <li>with UMTS transmission / with uplink / maximum</li> </ul>	5.76 Mbit/s
<ul style="list-style-type: none"> <li>for LTE transmission / with downlink / maximum</li> </ul>	100 Mbit/s
<ul style="list-style-type: none"> <li>for LTE transmission / with uplink / maximum</li> </ul>	50 Mbit/s
interfaces	
number of electrical connections	
<ul style="list-style-type: none"> <li>for internal network</li> </ul>	4
<ul style="list-style-type: none"> <li>for external network</li> </ul>	2
number of electrical connections	
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	2
type of electrical connection	
<ul style="list-style-type: none"> <li>for internal network</li> </ul>	RJ45 port (10/100 Mbit/s, TP, autocrossover)
<ul style="list-style-type: none"> <li>for external network</li> </ul>	SMA antenna socket (50 ohms)
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	Terminal strip
signal inputs/outputs	
number of electrical connections	
<ul style="list-style-type: none"> <li>for digital input signals</li> </ul>	1
<ul style="list-style-type: none"> <li>for digital output signals</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>for digital input signals</li> </ul>	Terminal block
<ul style="list-style-type: none"> <li>for digital output signals</li> </ul>	Terminal block
WAN connection	
type of wireless 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]	
• maximum	8 W
<b>ambient conditions</b>	
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
<b>design, dimensions and weights</b>	
design	compact
depth	127 mm
height	147 mm
width	35 mm
fastening method	
• 35 mm top hat DIN rail mounting	Yes
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• wall mounting	Yes
<b>product features, product functions, product components / general</b>	
product function	
• DynDNS client	Yes
• no-ip.com client	Yes
<b>product functions / management, configuration, engineering</b>	
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
<b>product functions / diagnostics</b>	
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
<b>product functions / DHCP</b>	
product function	
• DHCP client	Yes
• DHCP server - internal network	Yes
<b>product functions / routing</b>	
router function	
• NAT (IP masquerading)	Yes
• port forwarding	Yes

<ul style="list-style-type: none"> <li>• NAT traversal</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• 1:1 NAT</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DNS cache</li> </ul>	Yes
<b>product functions / security</b>	
suitability for operation / Virtual Private Network	Yes
firewall version	Statefull Inspection
product function	
<ul style="list-style-type: none"> <li>• password protection</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• packet filter</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• broadcast/multicast/unicast limiter</li> </ul>	No
product function	
<ul style="list-style-type: none"> <li>• broadcast blocking</li> </ul>	No
<ul style="list-style-type: none"> <li>• with VPN connection</li> </ul>	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"> <li>• IPsec tunnel and transport mode</li> </ul>	Yes
key length	
<ul style="list-style-type: none"> <li>• 1 / with IPsec AES / with Virtual Private Network</li> </ul>	128 bit
<ul style="list-style-type: none"> <li>• 2 / with IPsec AES / with Virtual Private Network</li> </ul>	192 bit
<ul style="list-style-type: none"> <li>• 3 / with IPsec AES / with Virtual Private Network</li> </ul>	256 bit
<ul style="list-style-type: none"> <li>• with IPsec 3DES / with Virtual Private Network</li> </ul>	168 bit
type of Internet key exchange / with Virtual Private Network	
<ul style="list-style-type: none"> <li>• main mode</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• quick mode</li> </ul>	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
<b>product functions / time</b>	
protocol / is supported	
<ul style="list-style-type: none"> <li>• NTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNTP</li> </ul>	Yes
<b>standards, specifications, approvals</b>	
standard	
<ul style="list-style-type: none"> <li>• for EMC</li> </ul>	ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-2, EN 61000-6-4
<ul style="list-style-type: none"> <li>• for hazardous zone</li> </ul>	EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X
<ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>	ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-4
<ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>	ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-2
certificate of suitability	
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• railway application in accordance with EN 50121-3-2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• railway application in accordance with EN 50121-4</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• railway application in accordance with EN 50155</li> </ul>	Yes; no coated printed circuit boards
<ul style="list-style-type: none"> <li>• railway application in accordance with EN 61373</li> </ul>	Yes; cat. 1, cl.A and cl. B
<ul style="list-style-type: none"> <li>• fire protection in accordance with EN 45545-2</li> </ul>	Yes
<b>further information / internet-Links</b>	
Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> </ul>	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
<ul style="list-style-type: none"> <li>• to web page: selection aid TIA Selection Tool</li> </ul>	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
<ul style="list-style-type: none"> <li>• to website: Industrial communication</li> </ul>	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>• to website: Industry Mall</li> </ul>	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
<ul style="list-style-type: none"> <li>• to website: Information and Download Center</li> </ul>	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
<ul style="list-style-type: none"> <li>• to website: Image database</li> </ul>	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>

- to website: CAx-Download-Manager
- to website: Industry Online Support

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

## security information

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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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