

### product type designation



### M876-4 LTE (EU)

SCALANCE M876-4 4G router; for wireless IP communication from Ethernet-based programmable controllers via LTE (4G) mobile radio optimized for usage 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 antenna(s)</li> </ul>                           | SMA antenna socket (50 ohms)                   |
| <ul style="list-style-type: none"> <li>for power supply</li> </ul>                                  | Terminal strip                                 |
| WAN connection  |  |
| type of wireless network / is supported   | LTE, UMTS, GSM                                 |
| 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  |  |
| <ul style="list-style-type: none"> <li>at rated supply voltage / maximum</li> </ul>                 | 330 mA   |
| power loss [W]  |  |
| <ul style="list-style-type: none"> <li>maximum</li> </ul>   | 8 W  |
| ambient conditions  |  |
| ambient temperature   |  |

|   |                      |
|---|----------------------|
| <ul style="list-style-type: none"> <li>during operation</li> </ul>                    | -20 ... +70 °C       |
| <ul style="list-style-type: none"> <li>during storage</li> </ul>                      | -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  |                      |
| <ul style="list-style-type: none"> <li>35 mm top hat DIN rail mounting</li> </ul>     | Yes                  |
| <ul style="list-style-type: none"> <li>S7-300 rail mounting</li> </ul>                | Yes                  |
| <ul style="list-style-type: none"> <li>S7-1500 rail mounting</li> </ul>               | Yes                  |
| <ul style="list-style-type: none"> <li>wall mounting</li> </ul>                       | Yes                  |
| <b>product features, product functions, product components / general</b>              |                      |
| product function  |                      |
| <ul style="list-style-type: none"> <li>DynDNS client</li> </ul>                       | Yes                  |
| <ul style="list-style-type: none"> <li>no-ip.com client</li> </ul>                    | Yes                  |
| <b>product functions / management, configuration, engineering</b>                     |                      |
| product function  |                      |
| <ul style="list-style-type: none"> <li>CLI</li> </ul>                                 | Yes                  |
| <ul style="list-style-type: none"> <li>web-based management</li> </ul>                | Yes                  |
| <ul style="list-style-type: none"> <li>MIB support</li> </ul>                         | Yes                  |
| <ul style="list-style-type: none"> <li>TRAPs via email</li> </ul>                     | Yes                  |
| protocol / is supported   |                      |
| <ul style="list-style-type: none"> <li>Telnet</li> </ul>                              | Yes                  |
| <ul style="list-style-type: none"> <li>HTTP</li> </ul>                                | Yes                  |
| <ul style="list-style-type: none"> <li>HTTPS</li> </ul>                               | Yes                  |
| type of configuration   | Web-based management |
| <b>product functions / diagnostics</b>  |                      |
| protocol / is supported   |                      |
| <ul style="list-style-type: none"> <li>SNMP v1</li> </ul>                             | Yes                  |
| <ul style="list-style-type: none"> <li>SNMP v2</li> </ul>                             | Yes                  |
| <ul style="list-style-type: none"> <li>SNMP v2c</li> </ul>                            | Yes                  |
| <ul style="list-style-type: none"> <li>SNMP v3</li> </ul>                             | Yes                  |
| product function  |                      |
| <ul style="list-style-type: none"> <li>statistics Packet Size</li> </ul>              | No                   |
| <ul style="list-style-type: none"> <li>statistics packet type</li> </ul>              | No                   |
| <ul style="list-style-type: none"> <li>error statistics</li> </ul>                    | No                   |
| <ul style="list-style-type: none"> <li>SysLog</li> </ul>                              | Yes                  |
| <ul style="list-style-type: none"> <li>packet filter log</li> </ul>                   | Yes                  |
| <b>product functions / DHCP</b>   |                      |
| product function  |                      |
| <ul style="list-style-type: none"> <li>DHCP client</li> </ul>                         | Yes                  |
| <ul style="list-style-type: none"> <li>DHCP server - internal network</li> </ul>      | Yes                  |
| <b>product functions / routing</b>  |                      |
| router function   |                      |
| <ul style="list-style-type: none"> <li>NAT (IP masquerading)</li> </ul>               | Yes                  |
| <ul style="list-style-type: none"> <li>port forwarding</li> </ul>                     | 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> <li>• with VPN connection</li> </ul>   | No<br>IPsec, OpenVPN (as Client)   |
| number of possible connections / with VPN connection  | 20   |
| type of authentication / with Virtual Private Network / PSK protocol / is supported   | Yes  |
| <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> <li>• 2 / with IPsec AES / with Virtual Private Network</li> <li>• 3 / with IPsec AES / with Virtual Private Network</li> <li>• with IPsec 3DES / with Virtual Private Network</li> </ul>   | 128 bit<br>192 bit<br>256 bit<br>168 bit   |
| type of Internet key exchange / with Virtual Private Network  |  |
| <ul style="list-style-type: none"> <li>• main mode</li> <li>• quick mode</li> </ul>   | Yes<br>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> <li>• SNTP</li> </ul>   | Yes<br>Yes   |
| <b>standards, specifications, approvals</b>   |  |
| standard  |  |
| <ul style="list-style-type: none"> <li>• for EMC</li> <li>• for hazardous zone</li> <li>• for emitted interference</li> <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, EN 61000-6-4<br>EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X<br>ETSI EN 301 489-1, ETSI EN 301 489-7, ETSI EN 301 489-24, EN 61000-6-4<br>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> <li>• CCC approval</li> <li>• railway application in accordance with EN 50121-3-2</li> <li>• railway application in accordance with EN 50121-4</li> <li>• railway application in accordance with EN 50155</li> <li>• railway application in accordance with EN 61373</li> <li>• fire protection in accordance with EN 45545-2</li> </ul> | Yes<br>Yes<br>Yes<br>Yes<br>Yes; no coated printed circuit boards<br>Yes; cat. 1, cl.A and cl. B<br>Yes  |
| <b>further information / internet-Links</b>   |  |
| Internet-Link   |  |
| <ul style="list-style-type: none"> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Selection guide for cables and connectors</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>            | <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a><br><a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a><br><a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a><br><a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a><br><a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a><br><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a><br><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>  |
| <b>security information</b>   |  |
| 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:**

5/11/2022 