



SCALANCE M876-4 4G router; for wireless IP communication from Ethernet-based programmable controllers via LTE (4G) mobile radio optimized for worldwide usage, VPN, firewall, NAT; 4-port switch; 2x SMA antennas, MIMO technology; 1x digital input, 1x digital output; observe national approvals.

transfer rate	
transfer rate / for Industrial Ethernet	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 	RJ45 port (10/100 Mbit/s, TP, autocrossover)
<ul style="list-style-type: none"> for external antenna(s) 	SMA antenna socket (50 ohms)
<ul style="list-style-type: none"> for power supply 	5-pole terminal strip
signal inputs/outputs	
number of digital inputs	1
number of digital outputs	1
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	850 MHz, 900 MHz, 1800 MHz, 1900 MHz
frequency band / is supported	
<ul style="list-style-type: none"> LTE 	B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B26, B28, B38, B40, B41, B66
<ul style="list-style-type: none"> UMTS 	B1, B2, B4, B5, B6, B8, B19
supply voltage, current consumption, power loss	
supply voltage / rated value	10.8 ... 28.8
consumed current	
<ul style="list-style-type: none"> at DC / at 24 V / typical 	0.33 A
power loss [W]	
<ul style="list-style-type: none"> maximum 	8 W
supply voltage / 1 / rated value	24 V
<ul style="list-style-type: none"> type of voltage / 1 / of the supply voltage 	DC

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
fastening method	
• 35 mm top hat 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 function / is supported / identification link	Yes; according to IEC 61406-1:2022
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

<ul style="list-style-type: none"> • packet filter • broadcast/multicast/unicast limiter 	<p>Yes</p> <p>No</p>
product function	
<ul style="list-style-type: none"> • broadcast blocking • with VPN connection 	<p>No</p> <p>IPsec, OpenVPN (as Client)</p>
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 • 2 / with IPsec AES / with Virtual Private Network • 3 / with IPsec AES / with Virtual Private Network • with IPsec 3DES / with Virtual Private Network 	<p>128 bit</p> <p>192 bit</p> <p>256 bit</p> <p>168 bit</p>
type of Internet key exchange / with Virtual Private Network	
<ul style="list-style-type: none"> • main mode • quick mode 	<p>Yes</p> <p>Yes</p>
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 • SNTP 	<p>Yes</p> <p>Yes</p>
standards, specifications, approvals	
standard	
<ul style="list-style-type: none"> • for EMC • for emitted interference • for interference immunity 	<p>ETSI EN 301 489-1, ETSI EN 301 489-52, EN 55011, NAMUR NE21</p> <p>CISPR 32, ETSI EN 55032 Class A / Class B, EN IEC 61000-6-3, EN IEC 61000-6-4</p> <p>CISPR 35, EN 55035, EN IEC 61000-6-1, EN IEC 61000-6-2</p>
certificate of suitability	
<ul style="list-style-type: none"> • 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 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes; no coated printed-circuit boards, EMC: trackside unit/vehicle unit, climate: use in the vehicle within equipment boxes/cabinets, mechanical system: class B: in equipment housing</p>
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	KED
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to website: Mobile radio national approval • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support 	<p>https://support.industry.siemens.com/cs/ww/en/view/109766358</p> <p>https://www.siemens.com/tstcloud</p> <p>https://www.siemens.com/mobile-approvals</p> <p>https://www.siemens.com/simatic-net</p> <p>https://sieportal.siemens.com/</p> <p>https://www.automation.siemens.com/bilddb</p> <p>https://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
security information	
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Approvals / Certificates

General Product Approval	For use in hazardous locations		Radio Equipment Type Approval Certificate		
	 EG-Konf.	 IECEX	 ATEX	Miscellaneous	Confirmation

last modified:

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