

SCALANCE M876-3 3G router; for the wireless IP communication of Ethernet-based Programmable controllers via 3G mobile radio HSPA+/EV-DO, VPN, Firewall, NAT 4-port switch; Antenna diversity; 1x digital input, 1x digital output; observe national approvals! Observe provider's 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 EV-DO transmission / for forward link / maximum</li> </ul>	3.1 Mbit/s
<ul style="list-style-type: none"> <li>• for EV-DO transmission / for reverse link / maximum</li> </ul>	1.8 Mbit/s

## Interfaces

Number of electrical connections	
<ul style="list-style-type: none"> <li>• for internal network</li> <li>• for external network</li> </ul>	4 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> <li>• for external network</li> <li>• for power supply</li> </ul>	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"> <li>• for digital input signals</li> <li>• for digital output signals</li> </ul>	1 1
Type of electrical connection	
<ul style="list-style-type: none"> <li>• for digital input signals</li> <li>• for digital output signals</li> </ul>	Terminal block Terminal block

#### WAN connection

Type of mobile network / is supported	GSM, UMTS, CDMA, EV-DO
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	800 MHz, 850 MHz, 900 MHz, 1900 MHz, 2100 MHz
Operating frequency / for CDMA2000 transmission	800 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]	
<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> <li>• during storage</li> </ul>	-20 ... +60 °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	
<ul style="list-style-type: none"> <li>• 35 mm 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

#### Product features, product functions, product components / general

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

#### Product functions / management, configuration, engineering

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

#### Product functions / Diagnostics

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

#### Product functions / DHCP

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

#### Product functions / Routing

Router function	
<ul style="list-style-type: none"> <li>• NAT (IP masquerading)</li> </ul>	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	
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<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 FM</li> </ul>	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
<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 safety / from CSA and UL</li> </ul>	UL 60950-1, CAN/CSA C22.2 No. 60950-1-07, UL E115352 Vol. X2
<ul style="list-style-type: none"> <li>• for hazardous zone / from CSA and UL</li> </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
<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

### Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> <li>• to website: Selector 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 website: Selector SIMATIC NET 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>
<ul style="list-style-type: none"> <li>• to website: CAx Download Manager</li> </ul>	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>• to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

### Security information

Security information	<p>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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a>. (V3.4)</p>
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