



SCALANCE MUM853-1 (B1) 5G router, rel. 16, IP30, for wireless IP communication from Ethernet-based applications via public 3/4/5G mobile radio networks and private 5G networks, VPN, firewall, NAT, IPv6, connection to SINEMA RC via CLP, 4 SMA connections, 1x micro SIM slot, eSIM, 4x10/100/1000 Mbps RJ45 port, redundant DC 24 V, -30... +60 °C, CLP slot, 1x DI and 1x DO, observe national approvals!

transfer rate	
transfer rate / for Industrial Ethernet	10 Mbit/s, 100 Mbit/s, 1000 Mbit/s
transfer rate	
<ul style="list-style-type: none"> <li>with UMTS transmission / with downlink / maximum</li> </ul>	42 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>	1000 Mbit/s
<ul style="list-style-type: none"> <li>for LTE transmission / with uplink / maximum</li> </ul>	200 Mbit/s
<ul style="list-style-type: none"> <li>for 5G transmission / with downlink / maximum</li> </ul>	1000 Mbit/s
<ul style="list-style-type: none"> <li>for 5G transmission / with uplink / maximum</li> </ul>	500 Mbit/s
interfaces	
number of electrical/optical connections / for network components or terminal equipment / maximum	4
number of electrical/optical connections / for gigabit Ethernet / maximum	4
number of electrical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> </ul>	4
number of electrical connections	
<ul style="list-style-type: none"> <li>for external antenna(s)</li> <li>for power supply</li> <li>for redundant voltage supply</li> </ul>	4 1 1
type of electrical connection	
<ul style="list-style-type: none"> <li>for internal network</li> <li>for external antenna(s)</li> <li>for power supply</li> </ul>	RJ45 port (10/100/1000 Mbps, TP, auto-crossover) SMA antenna socket (50 ohms) 5-pole terminal strip
memory	
number of slots / for Micro-SIM card	1
product component / eSIM integrated	Yes
design of the removable storage / CLP	Yes
signal inputs/outputs	
number of digital inputs	1
number of digital outputs	1
type of electrical connection / at the digital inputs/outputs	terminal block
input voltage / at digital input / at DC	-30 ... +30 V
output voltage / at digital output / at DC / maximum	24 V; 0,5 A
operational current / of the signaling contacts / at DC / at 30 V / maximum	0.008 A
WAN connection	
type of wireless network / is supported	5G public networks, 5G private networks, LTE, UMTS
type of mobile wireless service / is supported	HSDPA, HSUPA, HSPA+
frequency band / is supported	
<ul style="list-style-type: none"> <li>5G Non-Standalone (NSA)</li> </ul>	n41, n78, n79

• UMTS	B1, B5, B8
<b>supply voltage, current consumption, power loss</b>	
consumed current	
• at DC / at 24 V	0.55 A
• at DC / at 24 V / sleep mode / maximum	0.013 A
<b>supply voltage / 1 / rated value</b>	24 V
• type of voltage	redundant power supply, 24 V DC
• type of voltage / 1 / of the supply voltage	DC
<b>supply voltage / 2 / rated value</b>	24 V
• type of voltage / 2 / of the supply voltage	DC
<b>ambient conditions</b>	
ambient temperature	
• during operation	-30 ... +60 °C
• during storage	-40 ... +85 °C
relative humidity / at 25 °C / during operation / maximum	95 %
protection class IP	IP30
<b>design, dimensions and weights</b>	
depth	137 mm
height	157 mm
width	35 mm
net weight	680 g
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
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
<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	Yes
• statistics packet type	Yes
• error statistics	Yes
• 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	

<ul style="list-style-type: none"> <li>• NAT (IP masquerading)</li> <li>• port forwarding</li> <li>• NAT traversal</li> <li>• 1:1 NAT</li> <li>• DNS cache</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<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> <li>• packet filter</li> <li>• broadcast/multicast/unicast limiter</li> </ul>	<p>Yes</p> <p>Yes</p> <p>No</p>
product function <ul style="list-style-type: none"> <li>• broadcast blocking</li> <li>• with VPN connection</li> </ul>	<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"> <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>	<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"> <li>• main mode</li> <li>• quick mode</li> </ul>	<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
<b>product functions / time</b>	
protocol / is supported <ul style="list-style-type: none"> <li>• NTP</li> <li>• SNTP</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>standards, specifications, approvals</b>	
certificate of suitability <ul style="list-style-type: none"> <li>• SRRC approval</li> <li>• NAL approval</li> <li>• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af</li> </ul>	<p>Yes; SRRC-ID: 2023CJ21647</p> <p>Yes; NAL-ID: 17-7730-234111</p> <p>Yes</p>
reference code <ul style="list-style-type: none"> <li>• according to IEC 81346-2:2019</li> </ul>	KED
<b>standards, specifications, approvals / Environmental Product Declaration</b>	
global warming potential [CO2 eq] <ul style="list-style-type: none"> <li>• total</li> <li>• during manufacturing</li> <li>• during operation</li> <li>• after end of life</li> </ul>	<p>445.68 kg</p> <p>32.3 kg</p> <p>413.22 kg</p> <p>0.16 kg</p>
<b>further information / internet links</b>	
internet link <ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to website: Mobile radio national approval</li> <li>• to website: Industrial communication</li> <li>• to web page: SiePortal</li> <li>• to website: Image database</li> <li>• to website: CAX-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a></p> <p><a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a></p> <p><a href="https://www.siemens.com/mobile-approvals">https://www.siemens.com/mobile-approvals</a></p> <p><a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a></p> <p><a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a></p> <p><a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a></p> <p><a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
<b>security information</b>	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic,

state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit [www.siemens.com/cybersecurity-industry](https://www.siemens.com/cybersecurity-industry). Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

**Approvals / Certificates**

General Product Approval	Radio Equipment Type Approval Certificate	Environment
<a href="#">Special Test Certificate</a>	<a href="#">Miscellaneous</a>	<a href="#">Miscellaneous</a> 

last modified:

12/23/2024 