



SCALANCE MUM856-1 (A1) 5G router, IP65, 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 N-Connect connections, 1x micro SIM slot, eSIM, 1x10/100/1000 Mbps M12 socket, redundant DC 24 V, M12 L-encoded, PoE, -30... +70 °C, CLP slot, 1x DI and 1x DO, A-coded, observe national approvals: [siemens.com/mobile-approvals](https://www.siemens.com/mobile-approvals) CERT ID: MS5G16R-65-M1-M12-E4-1

Technical Product Detail Page

<https://i.siemens.com/1P6GK5856-2EA10-3AA1>

transfer rate	
transfer rate / for Industrial Ethernet	10, 100, 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	1
number of electrical/optical connections / for gigabit Ethernet / maximum	1
number of electrical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> </ul>	1
number of electrical connections	
<ul style="list-style-type: none"> <li>for external antenna(s)</li> </ul>	4
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	1
<ul style="list-style-type: none"> <li>for redundant voltage supply</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> </ul>	M12 (8-pin, X-coded), PoE
<ul style="list-style-type: none"> <li>for external antenna(s)</li> </ul>	N-Connect (socket)
<ul style="list-style-type: none"> <li>for redundant voltage supply</li> </ul>	M12 (4-pin, L-coded)
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	M12 (4-pin, A-coded)
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 Standalone (SA)</li> </ul>	n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n75(DL), n77, n78, n79
<ul style="list-style-type: none"> <li>• 5G Non-Standalone (NSA)</li> </ul>	n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n66, n71, n77, n78, n79
<ul style="list-style-type: none"> <li>• LTE</li> </ul>	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29(DL), B30, B32(DL), B34, B38, B39, B40, B41, B42, B43, B46(DL), B48, B66, B71
<ul style="list-style-type: none"> <li>• UMTS</li> </ul>	B1, B2, B4, B5, B6, B8, B19
<b>supply voltage, current consumption, power loss</b>	
supply voltage / from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af	48 V
consumed current	
<ul style="list-style-type: none"> <li>• at DC / at 24 V</li> </ul>	0.55 A
<ul style="list-style-type: none"> <li>• at DC / at 24 V / sleep mode / maximum</li> </ul>	0.013 A
<ul style="list-style-type: none"> <li>• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>	0.27 A
power loss [W]	
<ul style="list-style-type: none"> <li>• at DC / at 24 V / typical</li> </ul>	13.2 W
<ul style="list-style-type: none"> <li>• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>	12.96 W
<b>supply voltage / 1 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>• type of voltage</li> </ul>	redundant 24 V DC power supply, M12, L-coded
<ul style="list-style-type: none"> <li>• type of voltage / 1 / of the supply voltage</li> </ul>	DC
<b>supply voltage / 2 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>• type of voltage / 2 / of the supply voltage</li> </ul>	DC
<b>supply voltage / 3 / rated value</b>	48 V
<ul style="list-style-type: none"> <li>• type of voltage / 3 / of the supply voltage</li> </ul>	DC, PoE
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-30 ... +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	IP65
<b>design, dimensions and weights</b>	
depth	45 mm
height	179 mm
width	166 mm
net weight	1300 g
fastening method	Wall mounting, mounting on a DIN rail with a separate mounting adapter
<ul style="list-style-type: none"> <li>• 35 mm DIN-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
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
<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> </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 301 489-19, ETSI EN 301 489-52, EN 55011, NAMUR NE21
<ul style="list-style-type: none"> <li>• for emitted interference</li> </ul>	CISPR 32, ETSI EN 55032 Class A / Class B, EN IEC 61000-6-3, EN IEC 61000-6-4
<ul style="list-style-type: none"> <li>• for interference immunity</li> </ul>	CISPR 35, EN 55035, EN IEC 61000-6-1, EN IEC 61000-6-2
certificate of suitability	
<ul style="list-style-type: none"> <li>• EC Declaration of Conformity</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Power-over-Ethernet according IEEE802.3at for type 1</li> </ul>	Yes

and IEEE802.3af

- railway application in accordance with EN 50121-3-2
- railway application in accordance with EN 50121-4
- railway application in accordance with EN 50155

Yes

Yes

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

- fire protection in accordance with EN 45545-2

Yes

**standards, specifications, approvals / Environmental Product Declaration**

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	394.89 kg
• during manufacturing	33.7 kg
• during operation	361 kg
• after end of life	0.19 kg

**further information / internet links**

internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Mobile radio national approval	<a href="https://www.siemens.com/mobile-approvals">https://www.siemens.com/mobile-approvals</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

**security information**

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 <a href="http://www.siemens.com/cybersecurity-industry">www.siemens.com/cybersecurity-industry</a> . 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 <a href="https://www.siemens.com/cert">https://www.siemens.com/cert</a> . (V4.7)
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**Approvals / Certificates**

**General Product Approval**



[China RoHS](#)



[Type Examination Certificate](#)

For use in hazardous locations	Radio Equipment Type Approval Certificate	Railway	Environment
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[FM](#)

[Miscellaneous](#)

[Confirmation](#)



last modified:

3/10/2026



SCALANCE MUM853-1 (B1) 5G router, 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: [siemens.com/mobile-approvals](https://www.siemens.com/mobile-approvals) CERT ID: MS5G16R-30-M1-RJ-E4-2

Technical Product Detail Page

<https://i.siemens.com/1P6GK5853-2EA10-2BA1>

### transfer rate

transfer rate / for Industrial Ethernet	10, 100, 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> </ul>	4
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	1
<ul style="list-style-type: none"> <li>for redundant voltage supply</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>for internal network</li> </ul>	RJ45 port (10/100/1000 Mbps, TP, auto-crossover)
<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>	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 Standalone (SA)</li> <li>• 5G Non-Standalone (NSA)</li> <li>• LTE</li> <li>• UMTS</li> </ul>	<p>n1, n3, n5, n8, n28, n41, n77, n78, n79</p> <p>n41, n78, n79</p> <p>B1, B3, B5, B8, B34, B38, B39, B40, B41</p> <p>B1, B5, B8</p>
<b>supply voltage, current consumption, power loss</b>	
consumed current	
<ul style="list-style-type: none"> <li>• at DC / at 24 V</li> <li>• at DC / at 24 V / sleep mode / maximum</li> </ul>	<p>0.55 A</p> <p>0.013 A</p>
<b>supply voltage / 1 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>• type of voltage</li> <li>• type of voltage / 1 / of the supply voltage</li> </ul>	<p>redundant power supply, 24 V DC</p> <p>DC</p>
<b>supply voltage / 2 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>• type of voltage / 2 / of the supply voltage</li> </ul>	DC
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	<p>-30 ... +60 °C</p> <p>-40 ... +85 °C</p>
relative humidity / at 25 °C / during operation / maximum	95 %
protection class IP	IP30
<b>design, dimensions and weights</b>	
design	compact
depth	137 mm
height	157 mm
width	35 mm
net weight	680 g
fastening method	
<ul style="list-style-type: none"> <li>• 35 mm DIN-rail mounting</li> <li>• S7-300 rail mounting</li> <li>• S7-1500 rail mounting</li> <li>• wall mounting</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>product features, product functions, product components / general</b>	
product function	
<ul style="list-style-type: none"> <li>• DynDNS client</li> <li>• no-ip.com client</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>product functions / management, configuration, engineering</b>	
product function	
<ul style="list-style-type: none"> <li>• CLI</li> <li>• web-based management</li> <li>• MIB support</li> <li>• TRAPs via email</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
protocol / is supported	
<ul style="list-style-type: none"> <li>• Telnet</li> <li>• HTTP</li> <li>• HTTPS</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
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	
<ul style="list-style-type: none"> <li>• SNMP v1</li> <li>• SNMP v2</li> <li>• SNMP v2c</li> <li>• SNMP v3</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
product function	
<ul style="list-style-type: none"> <li>• statistics Packet Size</li> <li>• statistics packet type</li> <li>• error statistics</li> <li>• SysLog</li> <li>• packet filter log</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

**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
• 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**

certificate of suitability	
• SRRC approval	Yes; SRRC-ID: 2023CJ21647
• NAL approval	Yes; NAL-ID: 17-7730-234111
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes

**standards, specifications, approvals / Environmental Product Declaration**

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total	390.86 kg
• during manufacturing	29.7 kg
• during operation	361 kg
• after end of life	0.16 kg

**further information / internet links**

internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Mobile radio national approval	<a href="https://www.siemens.com/mobile-approvals">https://www.siemens.com/mobile-approvals</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>

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

<https://www.automation.siemens.com/bilddb>

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

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

## security information

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](http://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

Environment

[Special Test Certificate](#)

[Miscellaneous](#)



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3/10/2026



SCALANCE MUB852-1 (A1) 5G router, IP20, for wireless IP communication from Ethernet-based applications via public 3G/4G/5G mobile radio networks and private 5G networks, VPN (in combination with SINEMA RC device license) firewall, NAT, IPv6, connection to SINEMA RC, 4 SMA connections, 1x nano SIM slot, 1x10/100/1000 Mbps RJ45 port, 24 V DC 0 to +55 °C, region version A1 observe national approvals! siemens.com/mobile-approvals CERT ID: EL5G16R-20-M1-RJ-E4-1

Technical Product Detail Page

<https://i.siemens.com/1P6GK5852-1EA10-1AA1>

### transfer rate

transfer rate / for Industrial Ethernet	10, 100, 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	1
number of electrical/optical connections / for gigabit Ethernet / maximum	1
number of electrical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> </ul>	1
number of electrical connections	
<ul style="list-style-type: none"> <li>for external antenna(s)</li> </ul>	4
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	1
type of electrical connection	
<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>	3-pin terminal strip

### memory

number of slots / for Micro-SIM card	1
product component / eSIM integrated	No
design of the removable storage / CLP	No

### 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 Standalone (SA)</li> </ul>	n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n48, n66, n71, n75(DL), n77, n78, n79
<ul style="list-style-type: none"> <li>5G Non-Standalone (NSA)</li> </ul>	n1, n2, n3, n5, n7, n8, n20, n25, n28, n30, n38, n40, n41, n66, n71, n77, n78, n79
<ul style="list-style-type: none"> <li>LTE</li> </ul>	B1, B2, B3, B4, B5, B7, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B29(DL), B30, B32(DL), B34, B38, B39, B40, B41, B42, B43, B46(DL), B48, B66, B71
<ul style="list-style-type: none"> <li>UMTS</li> </ul>	B1, B2, B4, B5, B6, B8, B19

### supply voltage, current consumption, power loss

consumed current	
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<ul style="list-style-type: none"> <li>• at DC / at 24 V</li> </ul>	0.3 A
power loss [W]	
<ul style="list-style-type: none"> <li>• at DC / at 24 V / typical</li> </ul>	7.2 W
<b>supply voltage / 1 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>• type of voltage / 1 / of the supply voltage</li> </ul>	DC
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	0 ... 55 °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>	
depth	74 mm
height	114 mm
width	50 mm
net weight	200 g
fastening method	mounting on DIN rail
<ul style="list-style-type: none"> <li>• 35 mm DIN-rail mounting</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
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
<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>	Yes
<ul style="list-style-type: none"> <li>• statistics packet type</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• error statistics</li> </ul>	Yes
<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

• packet filter	Yes
• broadcast/multicast/unicast limiter	No
product function	
• broadcast blocking	No
type of authentication / with Virtual Private Network / PSK	No
protocol / is supported	
• IPsec tunnel and transport mode	No
type of Internet key exchange / with Virtual Private Network	
• main mode	No
• quick mode	No
IETF profile / with Virtual Private Network / X.509v3 certificate	No

#### product functions / time

protocol / is supported	
• NTP	Yes
• SNTP	Yes

#### standards, specifications, approvals

standard	
• for EMC	ETSI EN 301 489-1, ETSI EN 301 489-19, ETSI EN 301 489-52, EN 55011, NAMUR NE21
certificate of suitability	
• EC Declaration of Conformity	Yes
• CE marking	Yes

#### further information / internet links

internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Mobile radio national approval	<a href="https://www.siemens.com/mobile-approvals">https://www.siemens.com/mobile-approvals</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

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#### Approvals / Certificates

General Product Approval	Radio Equipment Type Approval Certificate
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[Type Examination Certificate](#)

[Miscellaneous](#)

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