

### product type designation



### M812-1 ADSL2+ (Annex A)

SCALANCE M812-1 ADSL router; for wire-bound IP communication from Ethernet- based automation devices via Internet service provider; VPN, Firewall, NAT; 1x Ethernet RJ45 port, 1x digital input, 1x digital output; ADSL2+, Annex A

transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s
transfer rate	
<ul style="list-style-type: none"> <li>for ADSL2+ transmission / with downlink / maximum</li> </ul>	25 Mbit/s
<ul style="list-style-type: none"> <li>for ADSL2+ transmission / with uplink / maximum</li> </ul>	1.4 Mbit/s
interfaces	
number of electrical connections	
<ul style="list-style-type: none"> <li>for internal network</li> </ul>	1
<ul style="list-style-type: none"> <li>for external network</li> </ul>	1
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 network</li> </ul>	RJ45 DSL Port
<ul style="list-style-type: none"> <li>for power supply</li> </ul>	Terminal strip
signal inputs/outputs	
number of electrical connections	
<ul style="list-style-type: none"> <li>for digital input signals</li> </ul>	1
<ul style="list-style-type: none"> <li>for digital output signals</li> </ul>	1
type of electrical connection	
<ul style="list-style-type: none"> <li>for digital input signals</li> </ul>	Terminal block
<ul style="list-style-type: none"> <li>for digital output signals</li> </ul>	Terminal block
WAN connection	
type of WAN connection / is supported	ADSL, ADSL2, ADSL2+
operating mode for ADSL2/ADSL2+ / is supported	Annex A
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	320 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>	0 ... 60 °C
<ul style="list-style-type: none"> <li>during storage</li> </ul>	-40 ... +70 °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
net weight	400 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
<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	No
• statistics packet type	No
• error statistics	No
• 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	
• NAT (IP masquerading)	Yes
• port forwarding	Yes
• NAT traversal	Yes
• 1:1 NAT	Yes
• DNS cache	Yes
<b>product functions / security</b>	
suitability for operation / Virtual Private Network	Yes
firewall version	Statefull Inspection
product function	
• password protection	Yes
• packet filter	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 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> <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 192 bit 256 bit 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 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 Yes
<b>standards, specifications, approvals</b>	
standard	
<ul style="list-style-type: none"> <li>• for EMC</li> <li>• for FM</li> <li>• for hazardous zone</li> <li>• for safety / from CSA and UL</li> <li>• for hazardous zone / from CSA and UL</li> <li>• for emitted interference</li> <li>• for interference immunity</li> </ul>	EN 55022, EN 55024 FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4 EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X UL E115352 Vol. X2 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 EN 55022 Class A EN 55024
certificate of suitability	
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<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: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</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/snst">http://www.siemens.com/snst</a> <a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a> <a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
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