

Product type designation

SCALANCE 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



Transmission rate

Transfer rate	10 Mbit/s, 100 Mbit/s
Transfer rate	
<ul style="list-style-type: none"> • for ADSL2+ transmission / with downlink / maximum 	25 Mbit/s
<ul style="list-style-type: none"> • for ADSL2+ transmission / with uplink / maximum 	1.4 Mbit/s

Interfaces

Number of electrical connections	
<ul style="list-style-type: none"> • for internal network 	1
<ul style="list-style-type: none"> • for external network 	1
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 network 	RJ45 DSL Port
<ul style="list-style-type: none"> • for power supply 	Terminal strip

Signal-Inputs/outputs	
Number of electrical connections	
<ul style="list-style-type: none"> • for digital input signals • for digital output signals 	1 1
Type of electrical connection	
<ul style="list-style-type: none"> • for digital input signals • for digital output signals 	Terminal block 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"> • maximum 	8 W
Permitted ambient conditions	
Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage 	0 ... 60 °C -40 ... +70 °C
Relative humidity / at 25 °C / during operation / maximum	95 %
Protection class IP	IP20
Design, dimensions and weight	
Design	compact
Depth	127 mm
Height	147 mm
Width	35 mm
Net weight	400 g
Mounting type	
<ul style="list-style-type: none"> • 35 mm DIN rail mounting • S7-300 rail mounting • S7-1500 rail mounting • wall mounting 	Yes Yes Yes Yes
Product properties, functions, components / general	
Product function	
<ul style="list-style-type: none"> • DynDNS client • no-ip.com client 	Yes Yes

Product functions / management, configuration

Product function	
<ul style="list-style-type: none"> • CLI • web-based management • MIB support • TRAPs via email 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
Protocol / is supported	
<ul style="list-style-type: none"> • Telnet • HTTP • HTTPS 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
Type of configuration	Web-based management

Product functions / Diagnosis

Protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 • SNMP v2 • SNMP v2c • SNMP v3 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
Product function	
<ul style="list-style-type: none"> • Statistics Packet Size • Statistics packet type • Error statistics • SysLog • Packet Filter Log 	<p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p>

Product functions / DHCP

Product function	
<ul style="list-style-type: none"> • DHCP client • DHCP server - internal network 	<p>Yes</p> <p>Yes</p>

Product functions / Routing

Router function	
<ul style="list-style-type: none"> • NAT (IP masquerading) • Port forwarding • NAT traversal • 1:1 NAT • DNS cache 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Product functions / Security

Suitability for operation / Virtual Private Network	Yes
Firewall version	Statefull Inspection
Product function	
<ul style="list-style-type: none"> • Password protection • packet filter 	<p>Yes</p> <p>Yes</p>

<ul style="list-style-type: none"> • Broadcast/Multicast/Unicast Limiter 	No
Product function	
<ul style="list-style-type: none"> • broadcast blocking • with VPN connection 	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"> • IPsec tunnel and transport mode 	Yes
Key length	
<ul style="list-style-type: none"> • 1 / with IPsec AES / with Virtual Private Network 	128 bit
<ul style="list-style-type: none"> • 2 / with IPsec AES / with Virtual Private Network 	192 bit
<ul style="list-style-type: none"> • 3 / with IPsec AES / with Virtual Private Network 	256 bit
<ul style="list-style-type: none"> • with IPsec 3DES / with Virtual Private Network 	168 bit
Type of Internet key exchange / with Virtual Private Network	
<ul style="list-style-type: none"> • main mode 	Yes
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes

Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> • for EMC 	EN 55022, EN 55024
<ul style="list-style-type: none"> • for FM 	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"> • for hazardous zone 	EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X
<ul style="list-style-type: none"> • for safety / from CSA and UL 	UL E115352 Vol. X2
<ul style="list-style-type: none"> • for hazardous zone / from CSA and 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"> • for emitted interference 	EN 55022 Class A
<ul style="list-style-type: none"> • for interference immunity 	EN 55024
Certificate of suitability	

- CE marking

Yes

Further Information / Internet Links

Internet-Link

- to website: Selector for cables and connectors
- to website: Selector SIMATIC NET SELECTION TOOL
- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/snst>

<http://www.siemens.com/snst>

<http://www.siemens.com/simatic-net>

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

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

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

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

Security information

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

last modified:

08/27/2019