

Product type designation

SCALANCE M812-1 ADSL2+ (annex B)

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 B



Transfer 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	
• for digital input signals	1
• for digital output signals	1
Type of electrical connection	
• for digital input signals	Terminal block
• for digital output signals	Terminal block

WAN connection

Type of WAN connection / is supported	ADSL, ADSL2, ADSL2+
Operating mode for ADSL2/ADSL2+ / is supported	Annex B, Annex J

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]	
• maximum	8 W

Ambient conditions

Ambient temperature	
• during operation	0 ... 60 °C
• during storage	-40 ... +70 °C
Relative humidity / at 25 °C / during operation / maximum	95 %
Protection class IP	IP20
Design	compact
Mounting type	
• 35 mm DIN rail mounting	Yes
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• wall mounting	Yes

Product features, product functions, product components / general

Product function	
• DynDNS client	Yes
• no-ip.com client	Yes

Product functions / management, configuration, engineering

Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes

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

Product functions / Diagnostics

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

Product functions / DHCP

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

Product functions / Routing

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

Product functions / Security

Suitability for operation / Virtual Private Network	Yes
Firewall version	Statefull Inspection
Product function	
<ul style="list-style-type: none"> • Password protection 	Yes
<ul style="list-style-type: none"> • packet filter 	Yes
<ul style="list-style-type: none"> • Broadcast/Multicast/Unicast Limiter 	No
Product function	
<ul style="list-style-type: none"> • broadcast blocking 	No
<ul style="list-style-type: none"> • 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 <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 • 2 / with IPsec AES / with Virtual Private Network • 3 / with IPsec AES / with Virtual Private Network • with IPsec 3DES / with Virtual Private Network 	128 bit 192 bit 256 bit 168 bit
Type of Internet key exchange / with Virtual Private Network <ul style="list-style-type: none"> • main mode • quick mode 	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

Product functions / time

Protocol / is supported <ul style="list-style-type: none"> • NTP • SNTP 	Yes Yes
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Standards, specifications, approvals

Standard <ul style="list-style-type: none"> • for EMC • for FM • for hazardous zone • for safety / from CSA and UL • for hazardous zone / from CSA and UL • for emitted interference • for interference immunity 	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"> • CE marking 	Yes

Further information / Internet-Links

Internet-Link <ul style="list-style-type: none"> • to website: Selector for cables and connectors 	http://www.siemens.com/snst
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- 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/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

Security information

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)

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