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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	
• for ADSL2+ transmission / with downlink / maximum	25 Mbit/s
• for ADSL2+ transmission / with uplink / maximum	1.4 Mbit/s

Interfaces	
Number of electrical connections	
• for internal network	1
• for external network	1
Number of electrical connections	
• for power supply	2
Type of electrical connection	
• for internal network	RJ45 port (10/100 Mbit/s, TP, autocrossover)
• for external network	RJ45 DSL Port
• 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, dimensions and weights

Design	compact
Depth	127 mm
Height	147 mm
Width	35 mm
Net weight	400 g
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
• TRAPs via email	Yes
Protocol / is supported	
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
Type of configuration	Web-based management

Product functions / Diagnostics

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

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

Standard	
• for EMC	EN 55022, EN 55024
• for FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
• for hazardous zone	EN 60079-15, EN 60079-0, II 3 G Ex nA IIC T4 Gc, KEMA 07ATEX0145 X
• for safety / from CSA and UL	UL E115352 Vol. X2
• 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
• for emitted interference	EN 55022 Class A
• for interference immunity	EN 55024
Certificate of suitability	
• CE marking	Yes

Further information / Internet-Links

Internet-Link

- to website: Selector for cables and connectors   http://www.siemens.com/snst
- to website: Selector SIMATIC NET SELECTION TOOL   http://www.siemens.com/snst
- to website: Industrial communication   http://www.siemens.com/simatic-net
- to website: Industry Mall   https://mall.industry.siemens.com
- to website: Information and Download Center   http://www.siemens.com/industry/infocenter
- to website: Image database   http://automation.siemens.com/bilddb
- to website: CAx Download Manager   http://www.siemens.com/cax
- to website: Industry Online Support   https://support.industry.siemens.com

Security information

Security information

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