

SCALANCE M816-1 ADSL router; for wire-bound IP communication from Ethernet- based automation devices via Internet service provider; VPN, Firewall, NAT; 4-port switch; 1x digital input, 1x digital output; ADSL2+,Annex B,J



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 	4
<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 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	330 mA
Power loss [W]	
<ul style="list-style-type: none"> • maximum 	8 W

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 weights	
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 features, product functions, product components / general	
Product function	
<ul style="list-style-type: none"> • DynDNS client • no-ip.com client 	Yes 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	
<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 • 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

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

- 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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