Comnet RL1000GW/48/ESFP/S24/CH+ RL1000GW with 1 x RS-232/1 x RS-485/1 x 10/100 Tx/1 x 100/1000 Fx SFP and 2G/3G/HSPA+ Cellular Modem 24/48 VDC

This listing is for RL1000GW/48/ESFP/S24/CH+ (1 x RS-232, 1 x RS-485, 1 x 10/100 Tx, 1 x 100/1000 Fx SFP and 2G/3G/HSPA+ Cellular Modem, 24/48 VDC) only. Use description below as a general reference.

ComNet product series RL1000GW are substation-rated and industrially hardened layer 3 router/ gateways, with a unique and highly robust packet processing SCADA- aware security firewall for the most mission-critical and demanding cyber-security applications. The RL1000GW is intended for deployment in environments where high levels of electromagnetic noise and interference (EMI) and severe voltage transients and surges are routinely encountered, such as electrical utility substations and switchyards, heavy manufacturing facilities, trackside electronic equipment, and other difficult out-of-plant installations. Layer 3 routing functionality allows for the participation and foundation of a core network infrastructure. The compact-sized DIN-rail mountable RL1000GW is ideally suited to those installations and applications where space may be limited. These features make the RL1000GW an effective platform for deploying a secure communications and networking gateway for remote electrical utility sites, and other critical infrastructure applications.

Features:

- Fully compliant with the requirements of IEC 61850-3 and IEEE 1613 Class 2, for use in electrical utility substations; and NEMA TS-1/TS-2 for Traffic Signal Control Equipment
- For NERC-CIP-5 and NERC-CIP-014 compliance, or any network application demanding effective cyber-security protection
- Small Size: Perfect for installations where space may be extremely limited
- Optional internal 2G/3G/4G LTE GPRS/UMTS cellular radio modem with 2 SIM card slots, for maximum network reliability and availability
- Serial interface supports 2 ports of RS-232 or 1 port each of RS-232 and 4-wire RS-485 serial data, with serial gateway and serial tunneling
- Optional 100/1000 Mbps SFP uplink port, for high-speed connection to the user's network
- Highly advanced and sophisticated security suite: Per Port Deep Packet Inspection (DPI) SCADA-aware firewall supports DNP-3, ModBus, IEC 104/101, and IEC 61850 protocols for NERC-CIP-5 compliance
- Network Learning allows the user to easily create secure and highly effective SCADA firewall rules
- IEEE 802.1X Port-based network access contro
- L-2/3/4 ACL for incoming traffic, and layer 2/layer 3 VPN with IPsec
- User APA (Authentication Proxy Access) controls remote access and communications to end-point/edge of network devices by all users, with extreme granularity across the users, time, physical Ethernet or serial data ports, TCP ports, and SCADA protocols. It also provides PCAP for the entire allowed maintenance or access session.
- IPsec VPN with X.509 certificates, for use over any cellular or fiber-optic network
- Ethernet layer 3 IP routing with integrated VPN
- Fault/event notification provided through Syslog and SNMP traps
- Environmentally hardened for deployment in difficult unconditioned out-of-plant installations: Extended ambient operating temperature range of -40° C to + 85° C. Conformal coating is optionally available for humidity with condensation or airborne particulate matter environments
- Rugged metal housing. DIN-rail mountable, & rated for IP-30 ingress protection
- Internal/self-contained universal power supply: Available in operating voltage ranges from 9 to 60 VDC.
- No fans or forced-air cooling; cooling via natural convection eliminates unreliable and troublesome fans/moving parts, with no periodic maintenance requirements