Comnet RLXE4GE24MODMS/G4SFP Industrial 4 x 1000Base-X SFP Ports - Module Only

Industrial 4 × 1000Base-X SFP ports - Module Only (requires purchase of SFP modules)

ComNet product series RLXE4GE24MODMS is a substation-rated and industrially-hardened modular-configuration all-gigabit managed layer 2 switch/layer 3 router. The RLXE4GE24MODMS 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, track-side electronic equipment, and other difficult out-of-plant installations. The layer 3 static routing functionality allows for the participation and foundation of a core network infrastructure.

The user-configurable modularity provides a truly future-proof platform that may be upgraded or changed in the field at any time, to support changes in the user's communications and networking requirements as they arise. Four slots are provided in the chassis for accommodating individual modules featuring different combinations of SFP* and electrical 10/100/1000BASE-TX communications ports. The uplink module slot can accept either a 1 gigabit or a 10 gigabit module, with two or four 1 or 10 Gbps SFP+ ports. Dual user-replaceable redundant power supply modules provide an extremely high level of switch/router reliability, for those applications where the possibility of a power supply single-point-of-failure cannot be tolerated.

When configured with the 8-port 100/1000BASE-X SFP or 4 100 or 1000BASE-FX fixed ST or SC optics communications modules, the RLXE4GE24MODMS may be used for network aggregation applications, or where it is desirable to provide optical connectivity directly to the switch/router in electrically-noisy environments.

The RLXE4GE24MODMS supports multiple Ethernet redundancy protocols, including ComNet C-Ring (recovery time < 30ms, with >250 switches integrated within the ring), and MSTP with RSTP/STP compatibility. With its extremely fast recovery time, the most mission-critical applications are fully protected from network interruptions or temporary malfunctions due to possible short or long-term faults or outages within the network.

Features:

- Supports IEEE 1588v2 Precision Timing Protocol, Transparent Clock Synchronization (TC), for protective relaying and control applications
- User-programmable alarm relay for local or remote indication of a fault condition
- Com-Ring open architecture supports other switch manufacturers' ring technologies, for seamless network integration
- IPV6 internet protocol (latest version)
- Support for Modbus TCP protocol
- VLAN Unaware: Supports priority-tagged frames to be received by specific IEDs (Intelligent Electronic Devices)
- Provides HTTPS/SSH protocol for enhanced network security
- IEEE 802.3AZ Energy Efficient Ethernet-Compliant
- Application-based QoS management
- Device Binding security function
- DOS/DDOS auto-prevention
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- ACL, TACACS+ and 802.1x User Authentication for network security
- Supports Jumbo Frames
- Fully compliant with the requirements of IEC 61850-3 and IEEE 1613 Class 2, for use in electrical utility substations; NEMA TS-1/ TS-2 for Traffic Signal Control Equipment; and EN50155 for railway applications
- Future-proof fully modular configuration supports changes to the users communications and networking requirements, and simplifies network planning and design
- Choice of 100Mb, 1000Mb, or 10Gb port speeds, with either SFPs or fixed ST or SC optics
- Environmentally hardened for deployment in difficult unconditioned out-of-plant installations: Extended ambient operating temperature range of -40˚ C to +85˚ C, for use in virtually any environment. Conformal coating is optionally available for humidity with condensation or airborne particulate matter environments.
- Dual-redundant power supplies significantly reduce the possibility of a single-point-of-failure, for the highest system and network reliability. Multiple AC and DC operating voltages with front or rear chassis power connection interfaces available.
- C-Ring compatible: Network recovery time <30ms, with >250 switches within the ring, for Ethernet redundancy.
- MSTP, with RSTP/STP compatibility
- SMTP client & IP-based bandwidth management
- Rugged 19-inch rack-mount steel housing, 1 RU high (1.75") (Can be mounted in front or rear facing orientation)
- Ethernet Ring Protection Switching (ERPS) (G.8032)
- No fans or forced-air cooling; cooling via natural convection eliminates unreliable and troublesome fans/moving parts, with no periodic maintenance requirements.
- Electric Port Supports Auto-negotiation for Full Duplex or Half Duplex Data Throughput
- Web-based, Telnet, Console (CLI), and Windows-based utility (eConsole) configuration
- Layer 3 static routing and RIP functions
- Supports Loop Protection function