

Comnet RLMCSFPPOEHO Electrical Substation-Rated 10/100/1000 Mbps Media Converter With Universal PoE/60 Watts

The ComNet RLMCSFPPOEHO is a substation-rated and industrially hardened Ethernet media converter that supports Universal PoE (Power over Ethernet) powered devices requiring up to 60 watts of operating power. Designed to the requirements of IEC 61850-3, IEEE 1613 Class 2, EN50155, and NEMA TS-1/TS-2, it 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 and roadside electronic equipment, and other difficult out-of-plant applications. The DIP-switch-selectable 100BASE-FX or 1000BASE-FX port supports optical transmission media with selection of the appropriate ComNet SFP* module. User-selectable link fault pass-through provides remote indication of a network fault, and a summary fault alarm provides a local or remote indication via a dry contact closure in the event of loss of optical link or operating power. The 10/100/1000BASE-TX port supports both auto-negotiation and automatic MDI/MDI-X crossover for full and half-duplex operation; manual MDI/MDI-X switching is not required. The internal/self-contained power supply features redundant 48 VDC inputs, for the highest possible reliability. The simple to install, plug-and-play RLMCSFPPOE[HO] is DIN-rail or panel-mountable, and is ideal for mission-critical PoE applications where very high levels of reliability and network availability are of the utmost importance.

Features

- Supports PoE PDs (Powered Devices) requiring PoE (15 watts), PoE+ (30 watts), and Universal PoE/PoE++ (60 watts)
- Designed to the requirements of IEC 61850-3 and IEEE 1613 Class 2 for electrical utility substations, EN50155 for railway applications, and NEMA TS-1/TS-2 for traffic signal control equipment, and IEC/EN60950-1
- 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
- Link fault pass-through provides a remote indication of a network fault
- Internal/self-contained high-reliability power supply eliminates the need for an external power supply, and a screw terminal block connects directly to the power source for permanent, reliable, and maintenance-free operation
- Redundant power inputs, for extremely high levels of reliability and availability
- Summary fault alarm provides a local or remote indication via dry contact closure in the event of loss of optical link or operating power
- Rugged 19-gauge galvanized and powder-coated steel enclosure.
- No fans or forced-air cooling; cooling via natural convection eliminates unreliable and troublesome fans/moving parts, with no periodic maintenance requirements.
- Uses customer-installed ComNet SFPs for compatibility with a wide range of optical fibers, optical connector types, and optical transmission distances (SFPs ordered separately).
- Electric Port Supports Auto-negotiation for Full Duplex or Half Duplex Data Throughput
- Designed for wall or DIN rail mount installations

Applications

- For supporting NERC-CIP-014 compliance, and other critical infrastructure physical security applications where PoE-powered IP video cameras, access control equipment, perimeter security sensing devices, etc., are utilized
- Electrical substation automation & SCADA networks, protective relaying systems
- Power transmission & distribution systems, remote wind farm, hydroelectric, and solar/photovoltaic power generation facilities, and other electrical utility-specific applications
- Industrial/Factory Automation & Process Control SCADA Networks
- Chemical and petrochemical refining and processing facilities, oil and gas pipelines/transmission systems, and mining installations
- Food processing operations
- Wastewater treatment plants
- ITS/Transportation Traffic Signalization & Surveillance/Incident Detection Networks
- Railway/trackside control and monitoring systems
- Integrated IP-Video, VOIP, and Data Transmission Networks
- Cellular telephony and wireless backhaul networks