

Updated: Canary 10/100 Mb Ethernet Bridges

Featuring:

- **10/100BASE-T to 100BASE-FX Bridging Converters** ▪ **Auto-Cross RJ-45 Port** ▪
- **Flexible: Switch-Selectable Full or Half-Duplex Fiber Port Configuration** ▪
- **Special Order Single-Mode CWDM Transceivers for Multi-Channel Transport** ▪

Canary **CLE-1061, CLE-1062 & Single-Mode CLE-106XS** 10/100BASE-T to 100BASE-FX Ethernet Bridging Converters maintain long established industry standards for this class of products and are historically deployed in network installations world-wide.

CLE-106X series converters are optimized for environments where legacy 10 Mbps and 100 Mbps networks continue to intersect. They are commonly deployed where 110/240 VAC power with 3-wire plugs or uninterruptible Power Supply (UPS) equipment offering regulated AC current are found.

Updated **CLE-106X** Bridging Converters are simple "plug & play" devices that function seamlessly with older installed 10/100 Mbps equipment. A choice of standard SC, ST & LC Fiber connectors, provides 100 Mbps data transmission over typical multi-mode & single-mode Fiber. Connectors offering Bi-Directional links are also available.

CLE-106X variants, using CWDM optics, support up to eighteen dedicated channel wavelengths transmitted over Single-Mode Fiber [one] cable. Each CWDM wavelength, when Multiplexed, is transported in parallel with seventeen other available channels.

CLE-106X series Converters maintain Compatibility with Category-5 rated & higher UTP cables and offer a choice between Switch-Selectable Auto-negotiation and *Forced, Hard-set, Full-Duplex* RJ-45 port configurations for twisted-pair links.

Canary makes simple, exceptionally reliable, low-cost, Ethernet transmission products by making optimal use of advanced optics, state-of-the-art integrated circuits and surface-mount technology.

CLE-1061, CLE-1062 & CLE-106XS [Single-mode] Bridges plus Versions with CWDM & Single-Fiber, Bi-Directional Optics



▪ **Plug-and-Go: UTP, Fiber and Power Connections:**

Configure your application to run via Ethernet TCP/IP or UDP/IP. Connect each CLE Converter RJ-45 (Tx) port to the Source and Destination devices and connect the shared Fiber ports. Make the Power connections to each CLE-106X and power-up. *Easy & Secure Connections!*

▪ **Flexible, Secure Network/Host Configurations:**

Between Domains: Forward information between Production/Machining zones or between remote Production areas and separated corporate offices. Extend transmission distances while limiting EMI/EMC interference and possible data corruption.

Link Fault Signaling: Canary is the original developer of LFS Loss of Link technology that *Forwards* the loss of any link to end devices. This approach has been widely copied & disseminated throughout the networking industry.

Physical Security: Optional DIN-Rail connections enable mounting within locked cabinets to control unauthorized access & equipment tampering.

▪ **Unparalleled Network Integration and Versatility:**

Combine multiple, data channels into *virtual trunks* for parallel transport over a single Fiber strand using CWDM (Coarse Wavelength Division Multiplexing) transceivers paired with Optical Multiplexers.

Alternatively, create CWDM wavelength based, optical VLANs. Simply make additional Copper and Fiber connections to increase the number of active, two-way Links – *Easy, Secure Expansion!*

Canary Communications

Main Features:

Diagnostic LEDs:

- FD: Unit in Full-Duplex mode
- LNK: Receiving Link Pulses
- 100: UTP link at 100 Mbps
- LFS: Link Fault Signaling has detected Link Fault
- COL: Collisions are detected
- ACT: TX & RX Packet traffic
- Power: Powered ON

Networking:

- 10/100 BASE-TX / RJ-45 Port: Auto-MDI / MDIX Function
- 100BASE-FX port: Switched Full-Duplex & Half-Duplex modes

CLE-1061: Multi-Mode SC with standard 12 VDC PWR

CLE-1062: Multi-Mode ST with standard 12 VDC PWR

CLE-1061-S: Single-Mode SC & standard 12 VDC PWR

CLE-1062-S: Single-Mode ST & standard 12 VDC PWR

- Fiber Connector Types: **X = 1** ~ SC, **X = 2** ~ ST

Management & Configuration:

- DIP Switch enables 10/100BASE-TX Auto-Negotiation for Configuration to Full or Half-duplex operation
- DIP Switch enables *Forced* (Hard-Set) Full-Duplex / Half-Duplex RJ-45 operation
- DIP Switch (LFS) turns On Link Fault Signaling Circuit
- MDI / MDI-X [auto] switch: Automatically sets RJ-45 port to MDI or MDI-X configuration

Mechanical / Mounting:

- Desktop
- DIN-Rail: On Bottom [Back], On Sides with choice of Power (Wire) Connections – User makes selection
- DIN-Rail is Special Order at time of placing purchase orders

Power:

- 110 ~ 240 VDC Auto-ranging Power input & 12 VDC Output



Specifications:

Standards: IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-FX/TX
IEEE 802.1q VLAN Compatible
IEEE 802.3x Flow Control Compatible

Ports: [1] 100BASE-FX (SC, ST)
[1] 10/100BASE-TX (RJ-45)

Throughput: 74,400 + Packets per Second (pps) thru 100 Mbps connections (one-way transmission)

RAM Buffer: 1MB

Maximum Distances: Fiber Optic: 2 Km (m/m), Up to 110 km (s/m)

RJ-45 : 100 meters

Power: Input: 12 VDC via PWR Jack @ 0.8 A

Temperature: Operating: 0° C to 70° C
Storage: -20° C to 70° C

Humidity: Operating: 10% to 80% RH
Storage: 5% to 90% RH

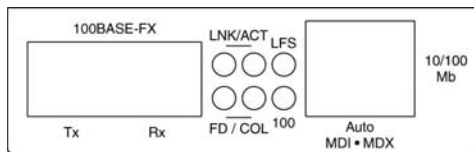
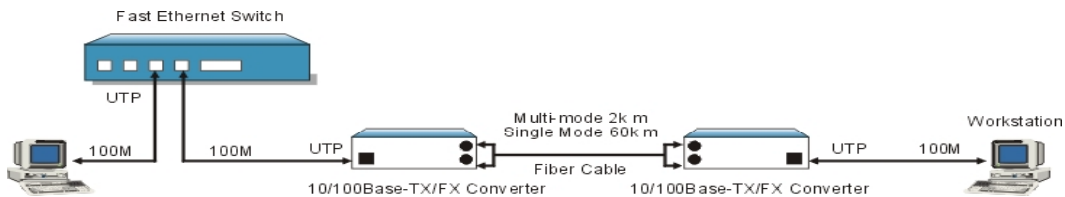
Emissions: FCC Part 15 of Class A & CE Approved

Dimensions: 4.29 in. X 2.92 in. X 0.95 in. (D x W x H)
[10.9 x 7.4 x 2.4 cm] (D x W x H)

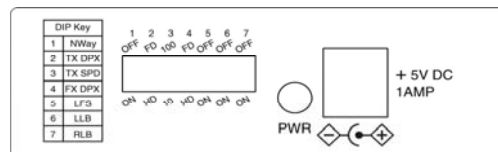
Weight: 2.6 lb. (1.2 Kg) (shipping weight)

Safety: EN 60950, US 21 CFR (J) & EN 60825-1

Example: Switch → Converter → Converter → Workstation



Chassis Front



Chassis Rear

For more information, please visit us at:
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The Canary Communications QMS
is Certified to ISO 9001:2015

11-24-21 JM

