

New! Canary Adds Layer-3 Switching Capability

Featuring:

- 24 (10/100) SFP Ports ▪ 4 (10/100/1000) RJ-45/SFP Auto-Select Channels ▪
- Enhanced Layer-3 Functionality with Multiple Management Options ▪
- Compatible with Active CWDM / DWDM Transceivers ▪ 1000BASE-T ▪ 1000BASE-SX

The **CMX-2800** Switch by Canary Communications, is a high-performance, twenty-eight channel, Layer-3 Ethernet Switch. Manageable, it provides twenty-four Fast Ethernet connections using SFP (Small Form Pluggable) slots and four Gigabit Ethernet, dual-media channels. It *Auto-Selects* between four Gigabit RJ-45 or SFP Fiber ports in any combination.

Web/SNMP/CLI Management provides flexible, remote network control and monitoring capability with many operational configuration and system/ network diagnostic options.

Whether managed via remote Internet web browsers, by "in-band" SNMP management stations, or through the local "out-of-band" RS-232 Serial Console port, the **CMX-2800** facilitates multi-layered, highly flexible, network configuration and control.

For applications needing increased bandwidth, the **CMX-2800** can accommodate up to 32 Trunk Groups using LACP Link Aggregation. Trunk(ed) Ports are configurable with an Auto-Fail-over function that provides *Redundant* back up if one or more of the Trunk Ports begin malfunctioning.

The **CMX-2800** also supports 802.1q VLAN and GVRP VLAN Registration, which simplify Network Traffic Segmentation, Broadcast Domain Extensions and other associated benefits of VLANs. The abundance of features translates into increased ease of network administration.

CMX-2800 Layer-3, Access Switch With 28 Ethernet Ports



100 Mb. SFP Ports [24] & [4] RJ-45 / SFP Auto-Select Gigabit Ethernet Channels.

▪ **Intuitive, User-Friendly System Management:**

Simple configuration via the Serial Console port using familiar Command Line structures; Provides secure, flexible, remote configuration and monitoring access via the WEB and intuitive GUI; In-band, SNMP security and system health monitoring, plus access to powerful RMON statistics collection.

▪ **Highly Flexible Switch/Network Configuration:**

Combine individual channels into multiple *Trunk Groups* or Trunk *four* Gigabit ports into a giant "*Big Pipe*". Create VLANs and Priority Queues for QoS (Quality of Service). Use in FTTX and CWDM installations. Multiple versions of Spanning Tree add System resilience. Simply plug in SFP-type Copper and Fiber connectors to add active channels. *Easy Expansion!*

▪ **Powerful Layer-3 Routing Functions:**

Familiar Static Route, RIP, OSPF as well as VRRP (Virtual Router Redundancy Protocol), PIM-DM (Protocol Independent Multi-cast Dense-Mode), DVRMP (Distance Vector Multi-cast Routing Protocol) and other Routing functions support sophisticated LAN/WAN based services.

▪ **Unparalleled Network Integration and Versatility:**

SFP connectors (including CWDM and Single-Fiber) expand customer access and utilization of existing fiber installations. Extensive switching functions provide customers *exactly* the multi-channel services desired. Makes expansions easy.

Canary Communications

Main Features:

Standards:

- IEEE: 802.3, 802.3u, 802.3z, 802.3ab, 802.3x, 802.3ad, 802.1d, 802.1w, 802.1s, 802.1q, 802.1p

Interface:

- Twenty four 100BASE-FX SFP slots
- Four Gigabit SFP/RJ-45
- RS-232 Console (RJ-45) Port

Networking:

- Spanning Tree Protocol/ Rapid Spanning Tree Protocol/ Multiple Spanning Tree(s)
- Automatic learning of up to 16K MAC addresses
- IGMP Snooping for multicast filtering
- GVRP VLAN Registration Protocol
- Access Control List L2/L3/L4/L7
- Ingress/Egress Rate limitation
- LACP Link Aggregation
- Full VLAN (802.1q)
- 8 Priority Queues
- DHCP Relay

Mechanical & Environmental:

- Desktop and rack-mountable unit
- Operating temperature: 0°C~50°C

Routing:

- Static route
- RIPv1/v2
- DVMRP
- OSPF
- PIM-DM
- VRRP

Management:

- SNMP
- RMON
- Telnet/Console
- Web-based GUI
- Command Line Interface (Cisco-like)
- IEEE 802.1x Network Access Control
- Port configuration, status, statistics, security
- Loss of link management on fiber ports
- Port mirroring

Power:

- 100 ~ 240VAC auto-ranging power input
- Redundant power option available
- 48VDC power option available



Specifications:

Standards:	IEEE 802.3 10BASE-T	VLAN:	Port-based and Tag-based (4 K VLANs)
	IEEE 802.3u 100BASE-FX/TX	QoS:	Port-based, IEEE 802.1p tag, IPv4 ToS/DiffServ, IPv6 Traffic Class, source&destination MAC addresses
	IEEE 802.3ab 1000BASE-T	Wavelength:	Depends on installed SFP module
	IEEE 802.3z 1000BASE-SX/LX/ZX	Max Distances:	Fiber Optic: Up to 110 km (s/m) RJ-45 : 100 m RS-232: 15 m
	IEEE 802.1d Spanning Tree Protocol	Power:	Power Input: 100 ~ 240VAC / 55W, 50/60 Hz
	IEEE 802.1s Multiple Spanning Tree	Temperature:	Operating: 0°C to 50°C Storage: -20°C to 70°C
	IEEE 802.1w Rapid Spanning Tree	Humidity:	Operating: 10% to 80% RH Storage: 5% to 90% RH
	IEEE 802.3ad Port Trunking	Emissions:	FCC Part 15 of Class A & CE Approved
	IEEE 802.3x Flow Control	Safety:	EN 60950
	IEEE 802.1p Priority Queues	Dimensions:	7.35 in. X 17.2 in. X 1.73 in. (D x W x H) [285 x 440 x 44 mm] (D x W x H)
	IEEE 802.1q VLAN Tagging	Weight:	9.5 lbs [≈ 4.4kg]
Ports:	24 x 100BASE-FX (SFP) 4 x GbE SFP 4 x 10/100/1000BASE-T (RJ-45) 1 x RS-232 Console (RJ-45)		
Throughput:	14,880/ 148,800/ 1,488,000 packets per second (pps) thru 10/100/1000 Mbps ports		
MAC Table:	Up to 16K addresses		

Warranty Information

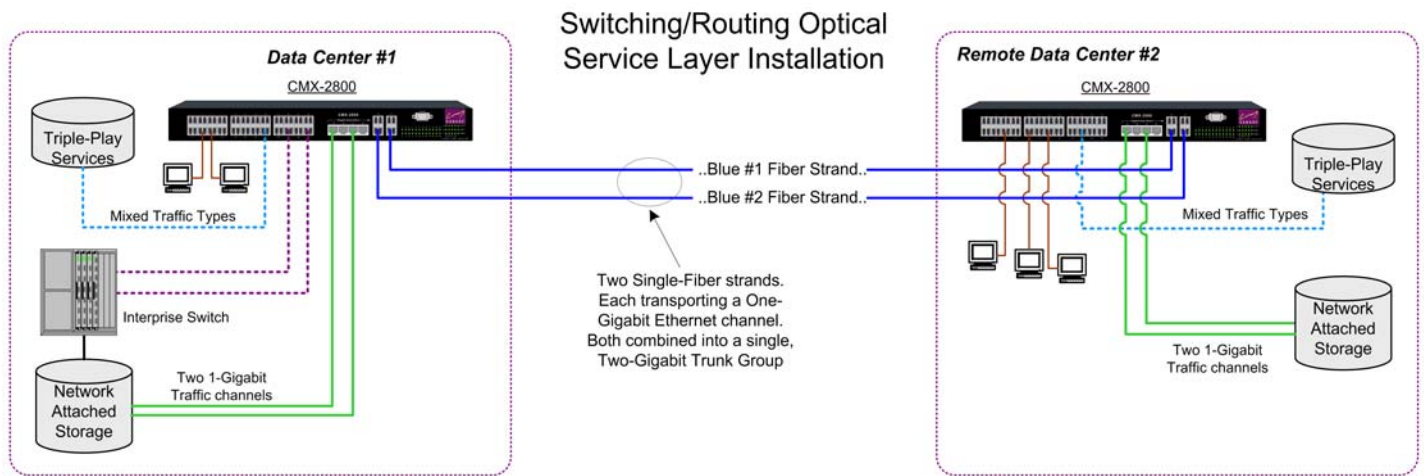
Canary Communications warrants the CMX-2800 and Small Form Pluggable (SFP) transceivers supplied by Canary to be in good working order for the period of THREE YEARS from the date of purchase from Canary or an authorized Canary reseller. Should the CMX-2800 and (SFP) transceivers fail anytime during said THREE-YEAR period, Canary will, at its option, replace or repair the product.

This Warranty is limited to defects in workmanship and materials and does not cover damage from accident, disaster, misuse, abuse, or unauthorized modifications. Canary Communications will not cover damage caused by third-party Small Form Pluggable (SFP) transceivers nor the transceivers themselves.

Under no circumstances will Canary Communications be liable for any damages incurred by the use of this product. This includes but is not limited to: lost profits, lost savings, and any incidental or consequential damages arising from the use of or inability to use this product.

If the product was purchased from an authorized Canary dealer, limited warranty service may be obtained by returning the product to the dealer. Return the product in its original shipping container (or equivalent), pre-insured, and with proof of purchase.

Canary Communications specifically disclaims all other warranties, express or implied. The installation or use of the CMX-2800 and Canary supplied Small Form Pluggable (SFP) transceivers shall imply acceptance of the above terms. CANARY COMMUNICATIONS, INC. reserves the right to make changes in specifications and other information contained in this document without prior notice. The reader may contact CANARY to determine if any such changes have been made.



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