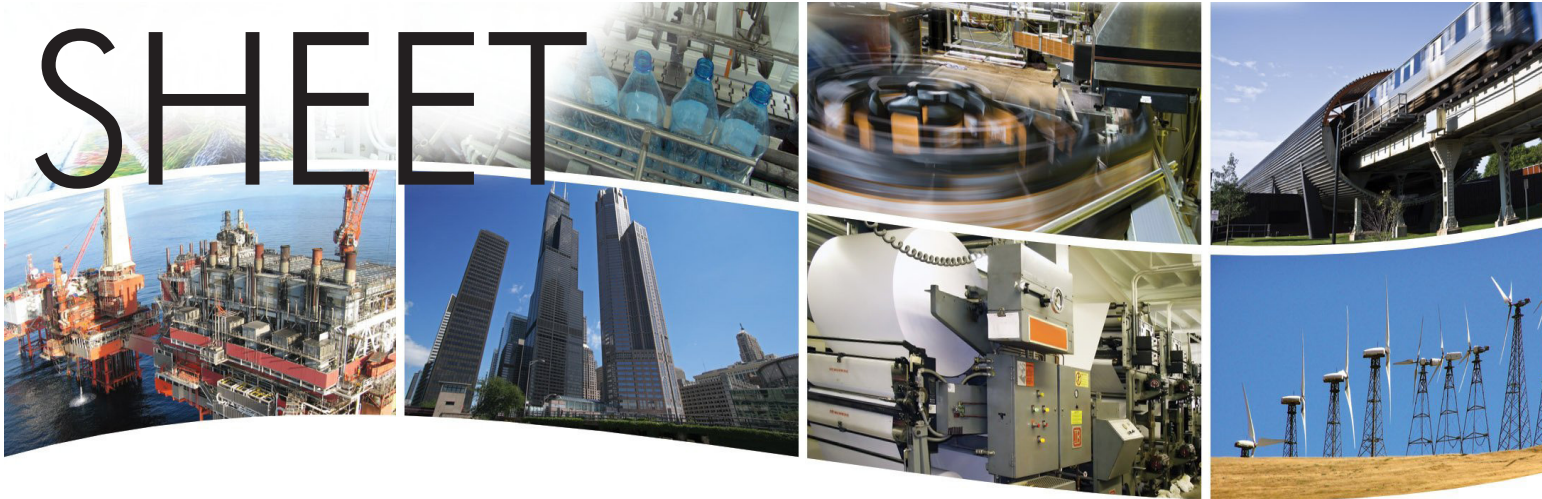# data
SHEET

EIRX28M-100T/4GT Managed Ethernet Switch — with 24 SFP Fibre Ports

The EIRX28M-100T/4GT industrial managed Ethernet switch from Contemporary Controls, provides compact 1U rack-mount design, flexible port configuration and high reliability. It provides error-free data transmission and network management functions in harsh industrial environments. The switch is equipped with four ports for 10/100 Mbps copper links, 20 ports for 100BASE-FX SFP links and 4 ports for 1000BASE-FX SFP links. It offers redundant power supply connections for sources providing 120 VAC. It can be installed with the included standard 1U rackmount kit.

SFP stands for small form-factor pluggable allowing the customer to select a mix of single mode and multimode transceivers with LC connectors that plug into the SFP cages. In addition to three EIRX28M chassis configurations, UL recognized four SFP transceivers for 100 and 1000 Mbps data rates with a choice of single mode or multimode operation. The four gigabit ports on the EIRX28M are for backbone use to other EIRX28M switches possibly using the rapid spanning tree protocol (RSTP). The 100 Mbps fiber ports are intended for EIS6 edge switch connections. For copper connections, the EIRX28M has four fixed auto-negotiating 10/100 Mbps ports that can attach to EIS8 edge switches or UL 864 compliant end stations.

Hardware Features

- Four 10/100 Mbps Copper Ports
- Twenty Fast Ethernet SFP Ports
- Four Gigabit Ethernet SFP Fibre Ports
- Redundant Power Supply Input
- Voltage Input: 120 VAC
- Ingress Protection Degree: IP 40
- Alarming Output: One Channel Relay Output
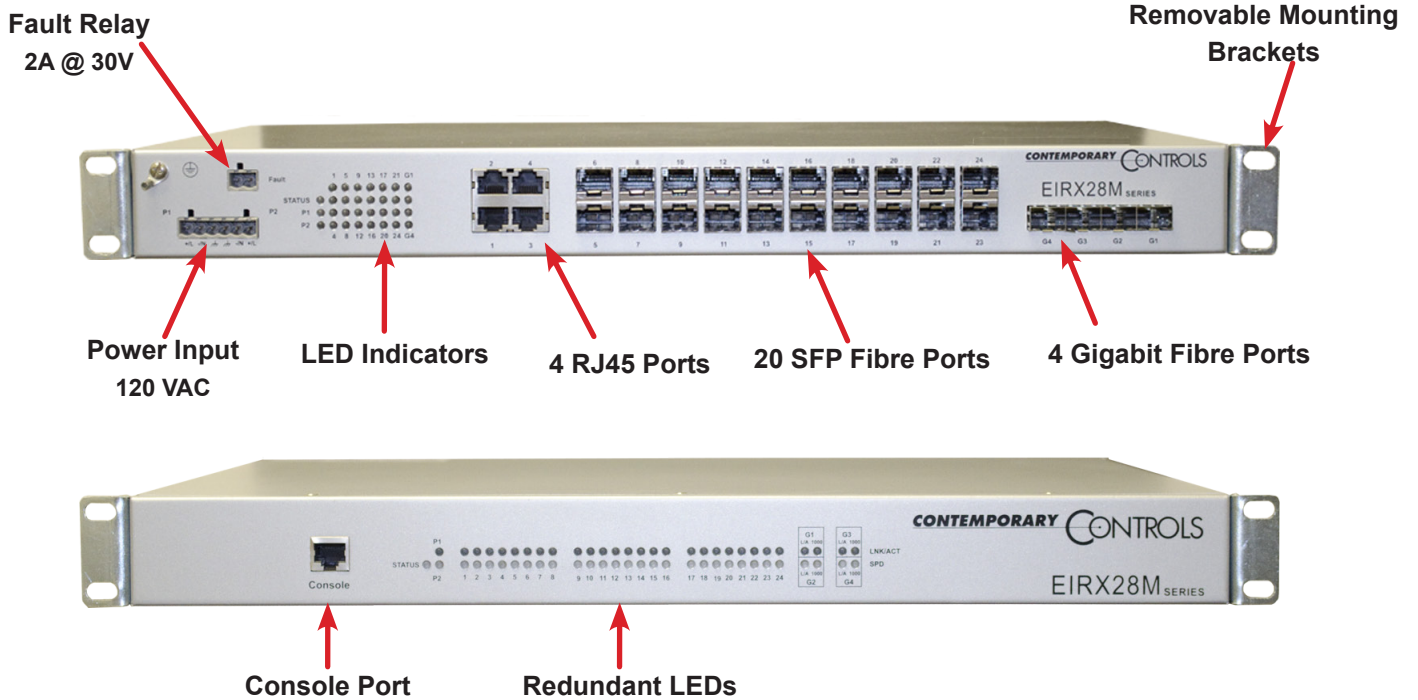- Console Port : RJ45 Copper Port

Software Features

- Network Redundancy Technology
- Private VLAN Partition
- Trunking
- Browser Configuration and Remote Management
- QoS
- IGMP Snooping/GMRP
- SNMP
- STP/RSTP
- On-line Software Upgrading

Standards Compliant

- UL 864 10th Ed. Recognized Component - Control Units and Acccessories for Fire Alarm Systems
- ULC-S527-11 Control Units for Fire Alarm Systems
- CE Mark
- RoHS compliant
- Industrial environment EMC compatible

CONTEMPORARY CONTROLS®

Technology

Fault Relay 2A @ 30V

Removable Mounting Brackets

Power Input 120 VAC

LED Indicators

4 RJ45 Ports

20 SFP Fibre Ports

4 Gigabit Fibre Ports

Console Port

Redundant LEDs

IEEE Standards:	802.3 10BASE-T Ethernet 802.3u 100BASE-TX and 100BASE-FX Fast Ethernet 802.3z 1000BASE-X Ethernet 802.3x Flow Control and Back Pressure 802.1p Class of Service 802.1Q VLAN Tag
Protocols:	IGMP Snooping, GRMP, SNMP v1/v2/v3, DHCP Cllinet, HTTP. HTTPS, Telnet, NTP Client
Processing Type:	Store-and-Forward
Flow Control:	Full Duplex Flow Control, Half Duplex Pressure Control
MAC Address:	8K
Transmission Distance:	Twisted-pair is 100 m. Single Mode Fibre Optical Cable is up to 15 km. Mulitmode Fiber is up to 2 km.
Port Counts:	Four 10/100 Mbps Copper Ports Twenty 100BASE-FX SFP Ports Four 1000BASE-FX SFP Fibre Ports
Regulatory Compliance:	UL 864 10th Ed. Recognized component, Control Units and Accessories for Fire Alarm Systems ULC-S527-11 Control Units for Fire Alarm Systems CE Mark; CFR 47, Part 15 Class A; RoHS

Console Port (RJ45):	Baudrate:	115200
	Data Bit:	8
	Parity Bit:	None
	Stop Bit:	1
	Flow Control:	None

Console Functions:	Overview, IP Setting, Factory Default

Interfaces

RJ45 Connector:	10/100 Auto-negotiation, Full/Half Duplex, Auto-MDI/MDIX Maximum transmission distance of CAT5 cable is 100 m.
Optical Fibre Connector:	LC Connector
Optical Fibre Module:	100BASE-FX SFP Module and 1000Base-FX SFP (accessories optional)
Relay Connector:	Pluggagle two position terminal block
Power Input Connector:	Pluggable Terminal Block

Physical

Dimensions (mm):	44H x 443W x 350D
Ingress Protection:	IP40
Installation Method:	Standard 1U Rackmount (leaving 1U of space between all devices for heat dissipation)

Specifications

LED Indicators

Power　　　　**Gigabit Ports**

P1, P2	STATUS	1000	LNK	LNK
Green On	Green Flashing Periodically	Green On	Green on	Green flashing
Power On	Processor Operating Normally	Link Rate 1000Mbps	Link Established	Data Transmitted

10/100BaseT(X)Copper Ports

SPD	SPD	LNK	LNK
Green On	OFF	Green On	Green Flashing
Link Rate 100Mbps	Link Rate 10Mbps	Link Established	Data Transmitted

Optical Fiber Ports

Mode	Transmission Distance	Centre Wave-length	Cable Size	TX Power(dBm)	RX Power(dBm)	Transmission Rate
Multi-mode	2km	1310nm	62.5/125um	−19~−14dBm	<−32dBm	100Mbps
Single mode	15km	1310nm	9/125um	−15~−8dBm	<−34dBm	100Mbps
Multi-mode	550m 275m	850nm	50/125um 62.5/125um	-9.5~-4dBm	<-17dBm	1000Mbps
Single mode	10km	1310nm	9/125um	-9.5~-3dBm	<−21dBm	1000Mbps

Environmental Conditions

Operation Temperature	Storage Ambient Temperature	Humidity	Model(-W)
–40°C~+75°C	–40°C~+85°C	5~95%	Industrial Wide Temperature Switch

No airflow requirement if operation temperature is not exceeded.

Power Supply Input

Input	Voltage	Power	Frequency
AC	120V	0.40 A max	50/60 Hz

Certification

CE FCC

| Standard	Test Method	Descriptions	Testing level
EN55024	EN61000-4-2	Electrostatic Discharge Test	8KV Contact Discharge 15KV Air Discharge
EN55024	EN61000-4-3 RI	Radiated Susceptibility Test	10V/m, 80MHz-1000MHz
EN55024	EN61000-4-4 FTB	Electrical Fast Transient / Burst Immunity Test	Power CM:4KV DM:4KV Signal CM:2KV DM:2KV
EN55024	EN61000-4-5 VS	Surge Immunity Test	Power, Signal CM:4KV Power, Signal DM:2KV
EN55024	EN61000-4-6 CI	Conducted Susceptibility Test	10V rms 0.15MHz to 80MHz
EN55024	EN61000-4-11 Voltage Dips/Interruptions	Voltage Dips, Interruptions and Voltage Variations Immunity Tests	1 Line Cycle@100% Dip 100ms @100% Dip
EN55022	CISPR 22 Radiated	Radiated Emission Test	Class A
EN55022	CISPR 22 Conducted	Conducted Emission Test	Class A
CFR47,P15	ANSIC63.4	Radiated Emission Test	Class A

RoHS

Mechanical Drawing

All dimensions are in mm.
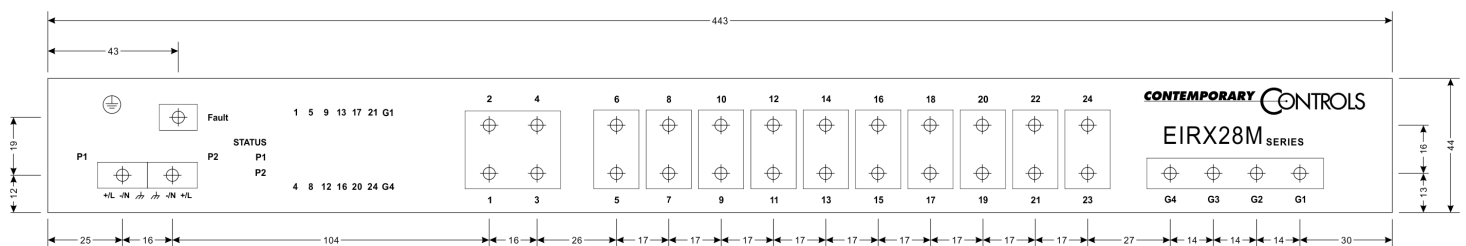
Length and width of EIRX28M:
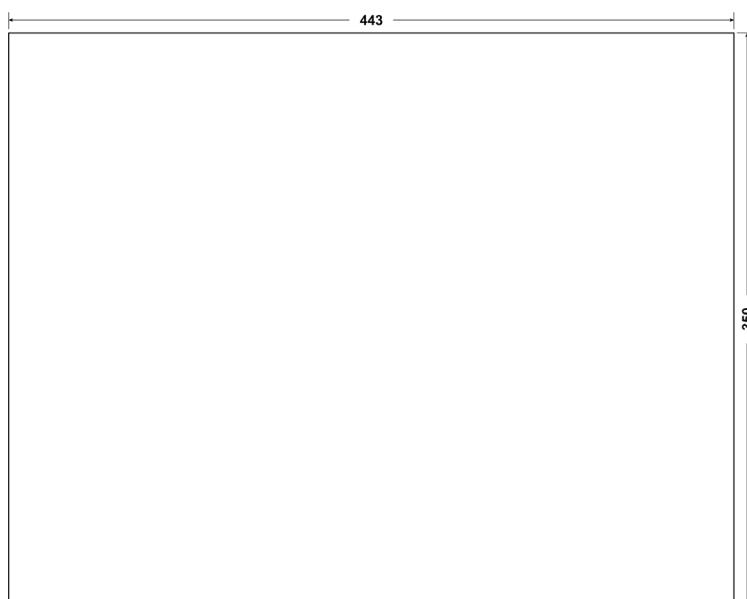
Ordering Information

Model	Description
EIRX28M-100T/4GT	Managed Ethernet switch chassis: 4 ports 10/100 Mbps copper, 20 ports 100Mbps SFP fiber, 4 ports 1000 Mbps SFP fiber
SFP-MM100FX	Small Form-Factor Pluggable Fibre Module: 1310nm, multi-mode, 100 Mbps, LC style connector 2km, -40°C to +85°C
SFP-SM100FX	Small Form-Factor Pluggable Fibre Module: 1310nm, single mode, 100 Mbps, LC style connector 15km, -40°C to +85°C
SFP-MM1000LX	Small Form-Factor Pluggable Fibre Module: 850nm, multi-mode, 1000 Mbps, LC style connector 550m, -40°C to +85°C
SFP-SM1000LX	Small Form-Factor Pluggable Fibre Module: 1310nm, single mode, 1000 Mbps, LC style connector 15km, -40°C to +85°C