

JumboSwitch[™]

Multi-Service Access Platform for Fiber Optic Networks

- Integrates Voice & Data over Ethernet
- Provides Total IP Network Compatibility and Scalability
- Modernizes Legacy Systems
- Operates in Harsh Industrial Environments
- Advantages over SONET/SDH



TC3840-4U



TC3840-2U



TC3840-Stand Alone

Benefits

Seamlessly integrates Ethernet, Data & Voice

Combines various interfaces and functions into a single unit

Highly resilient, reliable, and Gigabit fiber optic backbone.

Modern & Modular Design

Immune from EMC/EMI/RFI

Features

Industrial Hardened to withstand harsh environments (-40°C to + 80°C)

Redundant Optics and Power

Remote Firmware Upgrade

JumboSwitch Management System (JMS)

Supports various topologies: Bus/String, Star, Ring (various setups)

Cost Effective

Economic alternative to SONET / SDH

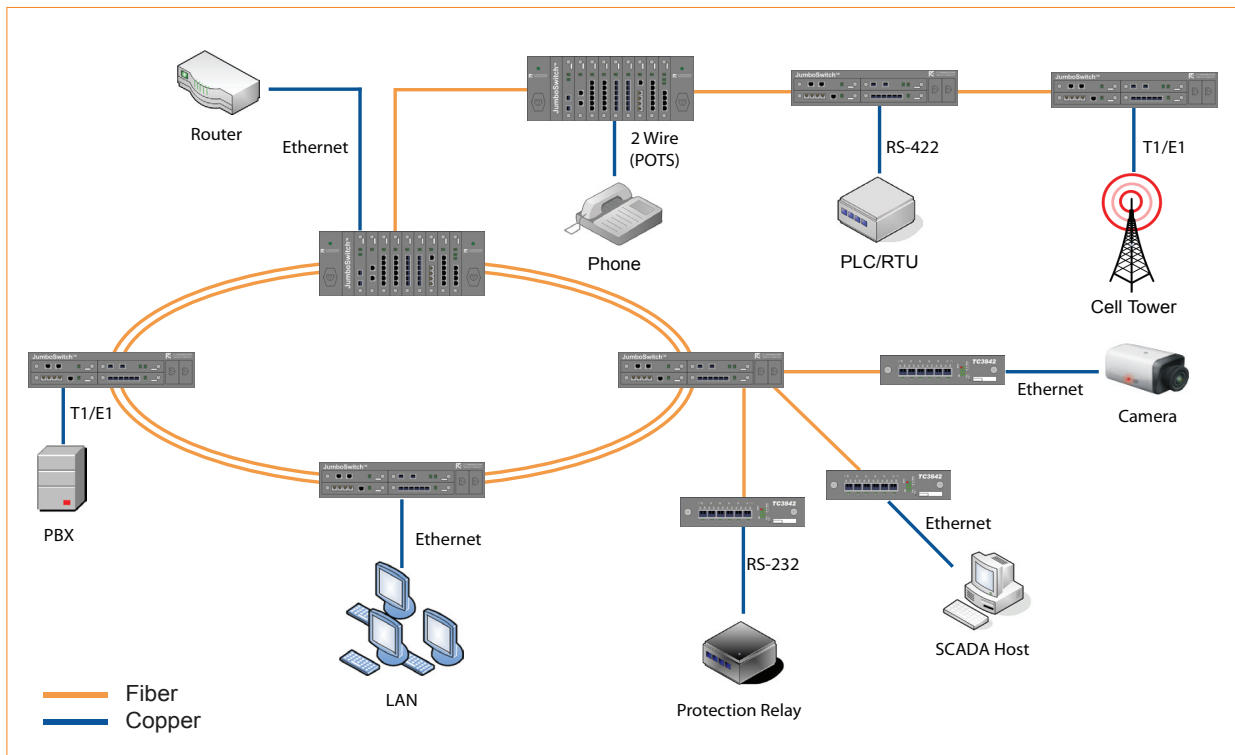
Maximizes bandwidth to save fiber

4U, 2U and Stand Alone units

Designed with scalability and flexibility for future growth

Simple solution for your complex needs

The JumboSwitch is designed to support virtually any network topology configuration, including string, star, and various ring setups.



Overview

The JumboSwitch seamlessly integrates Ethernet, Serial Data, TDM over IP and VoIP into your communications network. It can operate in extreme environments (-40° to 80°) and offers redundant power and optics for mission-critical connectivity. Interfaces include Ethernet, T1/E1, T3/E3, RS-232/422/485, and VoIP (FXO & FXS). It meets or exceeds pertinent industry and environmental compliances including CSA 60950, NEMA TS-2/Caltrans TEES, ITS, IEEE 1613 and IEC 61850-3.

The JumboSwitch makes communication network design amazingly flexible, efficient and straight forward, allowing for a wide variety of configurations of Ethernet, Voice or Data. Possibilities on a single JumboSwitch 4U unit include a 42-port GigE industrial hardened switch or 8 channels of T1, 8 phone and 12 RS-232.

It offers backward compatibility with legacy devices and forward compatibility with straight IP connectivity. Legacy equipment can co-exist harmoniously on the same platform with more advanced technologies including Ethernet, GigE fiber ports, Turbo Serial for protective relay communication, and LANex, a virtual VoIP PBX without the need of additional Call Managers or SIP Servers.

Advantages over SONET/SDH

Based on the most advanced Ethernet/IP, VoIP and TDMoIP technologies, the JumboSwitch MSAP family offers an efficient, low cost alternative to SONET/SDH network solutions for many applications. Compared to the complicated hierarchies of SONET or SDH based systems, it drastically reduces operational expenses (OPEX) since it eliminates unnecessary hardware layers. This significantly lowers skill levels required for installation, maintenance and troubleshooting.

In the past, SONET and SDH communication systems were the only choices when it came to building mission critical automation and control systems. But, progress in the control, computing and communication technologies has made these TDM based communication systems basically obsolete. The trend is moving towards Ethernet/IP based communication backbones.

Through the use of state-of-the-art technologies, the JumboSwitch provides users worldwide with the best price-performance ratio for their communications networks. It substantially reduces capital expenditures (CAPEX) by maximizing bandwidth usage and eliminating unnecessary hardware hierarchies.

Gigabit Ethernet



Variation Cards:

- ➔ 6 Ports 1000Base-TX
- ➔ 6 Ports 1000Base-FX
- ➔ 3 Ports 1000Base-TX,
3 Ports 1000Base-FX

Features:

STP, Rapid STP, Multiple STP, IGMP, IGMP Snooping, VLAN, Trunking, DHCP, BOOTP, TFTP, SMTP, RMON, Port Mirroring

Serial Server



Variation Cards:

- ➔ Serial Server
- ➔ Turbo Serial Server

Features:

RS-232 / RS-422 / RS-485
Data Transfer Rate: 300bps to 256kbps
ICMP, IP, TCP, UDP, DHCP, BOOTP, Telnet, DNS, HTTP, SMTP, Web, SNMP and Telnet consoles

TDM over IP



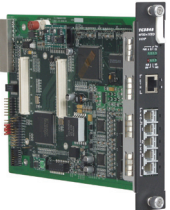
Variation Cards:

- ➔ T1 over Ethernet
- ➔ E1 over Ethernet
- ➔ T3 over Ethernet
- ➔ E3 over Ethernet

Features:

Multi-Drop and Insert
Point to Multipoint
Jitter Attenuation
Conforms to ANSI T1.102-1993, TR-TSY-000499, CCITT G.703

VoIP



Variation Cards:

- ➔ 4 FXS + 1 FXO
- ➔ 5 FXO

Features:

Audio Compression Standards:
G.711, G.723. 1, G.729, G.726, T.38
Supports Hybrid PBX and SIP Server address book
Echo Cancellation and Hot Link

APECUS Technologies Pte Ltd

1090 Lower Delta Road #07-08/09 Singapore 169201

Tel: (65) 6273 9100 Fax: (65) 6273 8113

Email: sales@apecus.com

Website: www.apecus.com