The TC3844-5 Ethernet-over-OC-3/STM-1 Gateway simplifies and lowers the cost of Gigabit Ethernet over SONET/SDH connectivity by extending Ethernet backhaul applications to remote locations. Using existing SONET/SDH infrastructure, the TC3844-5 converts Ethernet data into SONET/SDH framing for transmission over OC-3 links. 

The TC3844-5 performs store-and-forward of frames with Ethernet traffic conditioning and bridging functions at wire speed. The internal bridge supports VLAN tagging and priority labeling which enables the user to define different QoS levels according to the application requirements.

A variety of important features are included such as fault management, auto-negotiation with flow control, Statistics Monitoring, Network Time Protocol, Remote Firmware Upgrade and Temperature and Power Monitoring.

In-band management are accessed via Web, SNMP, Serial Console and Telnet. Diagnostic tools include LEDs, dry contact alarms and local and remote loop-back.

The TC3844-5 interface card can fit into any available JumboSwitch® housing option, including 2S Standalone chassis and 1U/2U/4U card cages. Power Redundancy is standard; power supply options for the standalone version are 90-260VAC, 12VDC, 24VDC and -48VDC. Standard operating temperature is -20°C to +70°C; the extreme temperature version is -40°C to +80°C.
Applications

- Bridging Ethernet LANs between Existing SONET/SDH Networks
- Establishing Demarcation Points between Carrier and Customer Networks
- Providing Low Cost IP migration path to SONET/SDH
- Enabling Bonded Transparent LAN Service

Specification Highlights

- Extreme Temp (-40°C to +80°C) Optional
- Meets or Exceeds IEC 61850-3, IEEE1613 & NEMA TS-2 Standards
- Member of the JumboSwitch® Product Family

Electrical

SONET
Electrical....................Coaxial, BNC
Line Termination..................75Ω
..................................Unbalanced
Fiber(OC-3)......................SFP LC
Data Rate....................155.52Mbps
Framing............................SONET
..................................GR-253-core, OC-3
SDH
Electrical....................Coaxial, BNC
Line Termination..................75Ω
..................................Unbalanced
Fiber(OC-3)......................SFP LC
Data Rate....................155.52Mbps
Framing............................SDH
..................................ITU-T G.708, G.709
Ethernet Interface
Connector...............Electrical RJ-45
Type..................10/100/1000 Base-T
Compliance...............IEEE 802.3
System
Bit Error Rate ..........1 in 10⁹ or Better

Regulatory Approval

CE, FCC Part 15, CISPR (EN55022)
CLASS A, IEC 61850-3, IEEE 1613,
NEMA TS-2

LEDs

ALM, RLB, MGM, S (Speed),
L (Link), PWR A, PWR B, BP, LOS, RDI,
L-ERR, BNC

Power

Standard................................12VDC
Optional.............................24, -48 VDC
......................................90-260 VAC, 50/60Hz
Power Consumption..........<10W

Operating Temperature
High Temp .....................-20°C to 70°C
Extreme Temp ..................-40°C to 80°C

Storage
Temperature.....................-40°C to 90°C
Humidity......................95% non-condensing

Physical (rack mount card)

Height.......................(3.15 cm) 1.24”
Width.........................(17.78 cm) 7.0”
Depth.........................(22.86 cm) 9.0”
Weight.......................(0.3kg) 0.75 lbs

Note: Information contained in this data sheet is subject to change without prior notice.