

## Overview

The TM4100 can be used with both DS3 and STM-1 Networks, it provides full OC3 and STM-1 access and OC3 add-drop. The TM4100 has full DS0 cross-connected built in, OC3/STM-1 port can be connected to OC3/STM-1 networks, three DS3 ports can also be connected to DS3 networks. The A-u Law conversion is also supported.

Data from any port or any timeslot of that port can be channeled to any port or any timeslot of any other port. Digitized voice channel will be appropriately converted between A-law and u-Law, channel associated signaling (CAS) will also be converted between T1 and E1 formats.

The TM4100 main chassis is 5RU high rack mountable box. It has 2 slots reserved for the main control board (redundant), 4 slots reserved for OC3/STM-1 cards, 6 slots reserved for DS3 ports and 4 slots reserved for the used of circuit board protection.

The TM4100 provides local and remote control and diagnostic supported by using VT100 terminal, Ethernet, Telnet and SNMP. ANSI (front and rear access) and ETSI (full front access) shelf are available. LED indicators for each port are on the front of the ETSI shelf, and are on front and back of the ANSI shelf.

The TM4100 is ideal for implementing simple trunking systems for premise, metropolitan, and industrial environments. Applications for the TM4100 include PCS trunking, SCADA, ITS, railway networks, electrical utility networks, and cellular networks.



## Features

- *Used with OC3, DS3 and STM1 Networks*
- *Up to 17 Plug-in modules:  
DS3(28T1/21T1), E3 (16E1)  
Circuit Protection card for DS3  
High Density 28 T1 Card*
- *DS0 Digital Cross Connected Between Plug-in Ports*
- *A-u Law Coding and Signaling Conversion*
- *Console Port, Ethernet, SNMP*
- *AC/DC Redundant Power Supplies*
- *In-band / Out-band Management*
- *Support OC3/STM-1 1+1 line*
- *Support DS3 1+1 line & Circuit Protection*

## Applications

- *Central Office Interconnects*
- *Local Exchange Digital Service*
- *PCS Trunking*
- *Metro Networks*
- *Campus Networks*
- *Traffic Networks*
- *Corporate and Enterprise Networks*

## Ordering Information

Model	Descriptions
TM4100-CH	Main Unit Basis Chassis ANSI Shelf w/o CPU and Power
TM4100-CHET	Main Unit Basis Chassis ETSI Shelf w/o CPU and Power

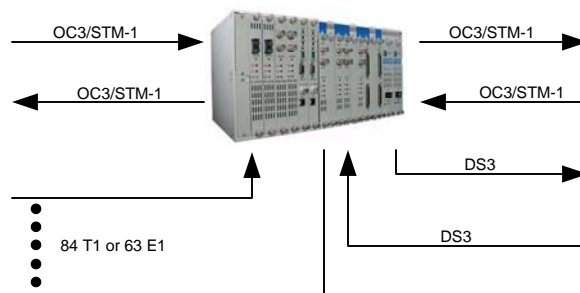
\*\*\* Please Consult Factory for Additional Model Numbers\*\*\*

### Specifications

<b>System:</b>	
Performance Store	The Last 24 hrs in 15 min Interval
Monitor Registers	Lines and Users
Performance Reports	Day & Time, Error Per Second, Degraded Minutes, Unavailable Second, Bursty Error Second, Severe Error Second, Controlled Slip Second, Loss of Frame Count
Alarm History	Day & Time, alarm Type (Master Clock Loss, RAI, AIS, LOS, BPV, ES, CSS), Bursty Seconds, Severely Error Second, Degrade Minutes
Threshold	BPV (Bipolar Violation), Error Second, Unavailable Second, Controlled Slip Second
LED Indicators	ANSI Shelf: Front and Back ETSI Shelf: Front
Management Access	Console: VT100 Terminal Ethernet: RJ45
Performance Store	The Last 24 hrs in 15 min Interval
<b>Physical:</b>	
ANSI Shelf	17.5" x 8.6" x 10.0"
ETSI Shelf	17.5" x 8.6" x 9.0"

<b>Interface Modules:</b>	
OC3/STM-1	Up to 4 Cards
DS3	Up to 6 Cards
Circuit Protection	Up to 4 Cards
Main Control Board	2 Cards (redundant)
Timeslot Interchange	Less than 700 Micro Second Delay
Timeslots Mapping	One Active, 3 Users Stored Maps
Voice Conversion	A-Law to u-Law G.711
CAS	Signaling Transparent (A=0 from E1 become A=0 T1, Etc.)
<b>Diagnostics:</b>	
Loop Back Test	Line Loop Back, Payload Loop Back, Local Loop Back
<b>Environment:</b>	
Operating	-10 <sup>0</sup> C to +65 <sup>0</sup> C
Storage	-40 <sup>0</sup> C to + 95 <sup>0</sup> C
Humidity	98% Non-Condensing
<b>Power:</b>	
AC	90 ~ 240 VAC, 50/60 Hz
DC	-48 VDC
Field Changeable	Single/Dual AC/DC or Mixed

### Applications



Typical TM4100 Application

