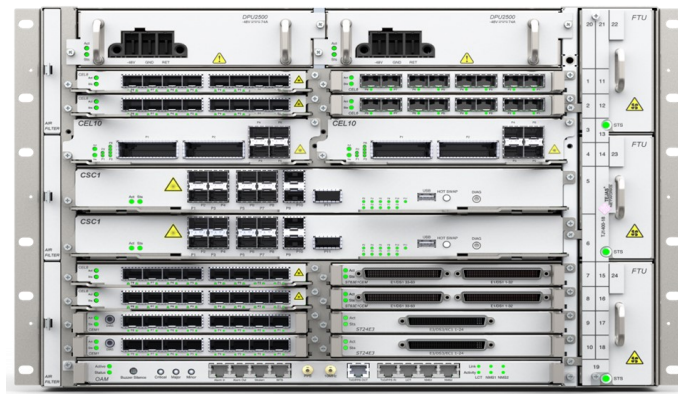


TJ1400 18-SLOT

Converged Next-generation Packet Transport Network (PTN) Aggregation Platform



High Capacity: 1T Switching Fabric

Slots : 16 Universal Tributary & 2 Fabric Slots

Technologies : Carrier Ethernet, MPLS & OTN

Best-in-class Circuit Emulation : PDH & SONET/SDH

MEF 2.0 Compliant E-Line, E-Lan, E-Tree

Services : GPON and IP-VPN

Introduction: TJ1400 18-slot is one of the industry's most feature-rich packet access & aggregation platforms. It provides unparalleled integration of Access, Transport and IP Network technologies in one integrated box and introduces a revolutionary way of building modern-day telco infrastructure, bringing down the cost of network build-outs dramatically. TJ1400 18-slot platform is designed for cost-optimized delivery of Mobile Backhaul, Broadband Access and Enterprise Cloud Services migration infrastructure. It provides redundancy, low power consumption, and high service scale in a compact next-generation platform. Key features include:

- Access technologies such as Active Ethernet (based on CE2.0), GPON, ERPSv2, Open ERPSv2
- Transport technologies such as PTN, MPLS-TP, Massive-scale Circuit Emulation with 1+1 APS support of TDM technologies such as PDH/SONET/SDH (E1/DS1/E3/DS3/STM-n/OC-n), Synchronization Services, OTN
- IP/MPLS Technologies such as Unidirectional/Bidirectional LSPs, OSPFv2, OSPF-TE, IPv4, LDP, RSVP-TE, CSPF, MPLS-TE, TE-FRR, LSP Ping/Traceroute, VRF Ping/Traceroute, VRRP, BGP/MPLS IP VPN etc.
- VRF-lite, VRF over MPLS-TP, Virtual Routers

Circuit Emulation: As more services move from TDM to Ethernet, Circuit Emulation reduces the cost and simplifies the management of residual TDM services using an all Packet Transport Network. TJ1400 18-slot supports E1/E3/DS3 SAToP and STM-1/4/16 CEP for carrying this traffic with the reliability and performance of legacy networks.

Advanced Ethernet Features: TJ1400 18-slot provides best in class packet switching to create networks with the highest performance. Ingress rate limiting ensures that every packet entering the network is within the SLA bounds preventing any one customer/service from congesting/choking the network. Each packet is classified so that the appropriate network policies (like prioritization and scheduling) can be applied. Eight CoS queues, HQoS and scheduling algorithms ensure that there are sufficient options available to manage the data traffic efficiently. Standard G.8032 ERPSv2 (Ethernet Ring Protection Switching) provides 50ms protected packet rings for greater resiliency. Multiple ringlets and multiple ring topologies are supported.

MPLS and VPN Services: TJ1400 18-slot supports both L2 and L3 VPN services. It allows real-time monitoring of end-to-end circuits, connections or trunks, enabling quick detection and isolation of faults to a particular subnet, trunk, link or node. TJ1400 18-Slot supports MPLS OAM with BFD,LSP Ping ,LSP Traceroute at tunnel/pseudowire level. It also supports MPLS-TP based performance OAM for MPLS-TP based PW services. For .1q/,1ad based MEF services, Y.1731/802.1ag based CFM OAM (Port level down MEP) and Y.1731 PM counters are supported.

Flexible Network Architectures: TJ1400 18-slot can build a flexible architecture best suited for all services. Linear for rapid deployment. Hub and spoke for cost-effective aggregation. Ring and ringlet for high utilization and resiliency. Meshed for low latency and flexible protection. This is achieved with a unique combination of functionality and ability for every optical port to be an UNI or an NNI.

TJ1400 18-SLOT

Converged Next-generation Packet Transport Network (PTN) Aggregation Platform

Packet Switching Capacity

1 Terabit Switch Fabric

Data Interfaces

100GE,200GE

10/100/1000BT, 100LX/FX

GE (SFP) and 10GE (SFP+), 100GE (CFP2/QSFP28)

OTU2e, OTU4 with GFEC Support

Services

MEF2.0 compliant Carrier Ethernet (E-Line, E-Lan, E-Tree)

MPLS L2 VPN Services - PW, MS-PW, VPLS & H-VPLS services

Circuit Emulation Services - SONET/SDH CEM-CEP: OC-3/12/48 and STM-1/4/16, PDH/Electrical CEM: T1/E1 and DS3/E3/EC-1*

GPON/NG-PON/NG-PON2/XGS-PON*

L3 VPN*, VRF-lite*, L3 VPN over MPLS-TP*, BGP IP/MPLS VPN Support*

Line Cards

CEM1 Multi-Service Line Card (8xSFP/SFP+ multi-rate/multi-protocol ports)

CEL12 8x10GE Ethernet Line Card (8xSFP+; single slot)*

CEL10 (formerly IO-200) 2x100GE + 4x10GE Ethernet Line Card (2xCFP2 Port, 4xSFP+; double slot)

CEL6 8xGE Ethernet Line Card (8xSFP Ports)

ST-OLT 8xSFP GPON Card*

PDH CEM Line Cards

Ethernet/MPLS-TP OAM

MPLS-TP OAM RFC5860

BFD based Fault OAM

LSP Ping and Traceroute (RFC6426)

PW Ping

On demand LM/DM at Tunnel/PW level

Om demand LM/DM at VLAN level

Y.1731/802.1ag based CFM OAM

Link integrity (LLCF/LLR)

SNMPv3*

CEM Protocols

MEF3 & MEF 8: Framework & Implementation Agreement for the Emulation of PDH Circuits over Metro Ethernet Networks

RFC 4553: Structure-Agnostic Time Division Multiplexing (TDM) over Packet (SAToP)

RFC 4842: SONET/SDH Circuit Emulation over Packet (CEP)

64ms Jitter Buffer

Clock recovery mechanisms

Differential Clock Recovery (DCR)

Internal (Retimed)

EPAR for CEP

Adaptive Clock Recovery (ACR)

Special features

1+1 sub-50ms APS for SONET/SDH/OTN Circuits

Comprehensive Loopback feature (both TDM as well as PSN side)

Integrated Test Set (ITS) for generating test traffic along with loopback to test the circuits

Comprehensive TDM-side and PSN-side alarm and performance monitoring

Network Protection & Security

Ethernet Ring Protection ITU-T G.8032 (ERPS, ERPSv2)

1:1 bidirectional Linear Protection LSP (RFC6378)

MPLS-TP Mesh

Link Aggregation Group (LAG)

Port mirroring and loopback

Power Supply (optional redundancy)

2500W Redundant DC PSU

Environmental

Operating Temperature: Up to 65°C.

Relative Humidity: 10% to 90%, non condensing

CE, ROHS,NEBS Compliant

ETSI/EN 300386

EN 55022 Class A

FCC Part 15 Class A

Dimensions (W x H x D)

482 mm x 309.75 mm x 268 mm

ETSI and 23" rack mount options

**upcoming release specifications subject to change without notice*



Software Enabled Transformation

Copyright Tejas Networks Ltd. 2018

Plot No 25, JP Software Park

Electronic City Phase 1

Bangalore 560 100, India