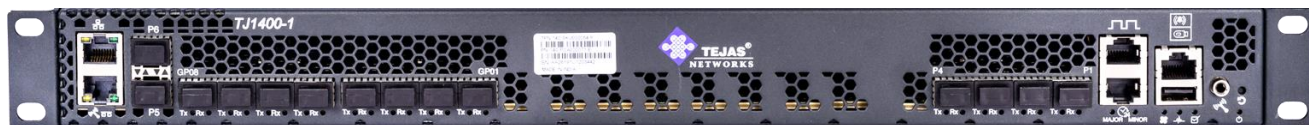


TJ1400-1: 8-Port and 16-Port GPON

Ultra-Converged Broadband Solutions



DATA SHEET



TJ1400-1 : 8-Port GPON



TJ1400-1 : 16-Port GPON

Product Highlights

Residential, Enterprise, Mobile Backhaul and IoT applications

Compact Application with state-of-the-art OLTs

Enhanced QoS and Multicast for Video.

Multi-tenant dwelling with AC / DC Power

Enhanced Business services with protection

Overview

Ultra Converged Broadband Solutions provide the flexibility, performance and investment return required by today's total cost per subscriber business plans. These solutions are capable of delivering Broadband Access via fiber or wirelessly, Business services via dedicated or shared access, and with integrated reliable transport capabilities, they reduce costs immediately, while providing scalability for the future.

Multilevel Protection and QoS guards customers against fiber cuts, splitter damage, ONT and OLT port failures. Advanced bandwidth management features assure the highest quality of service for delay/jitter sensitive real-time video/voice/data applications.

Carrier-class service creation with a fully managed, end-to-end solution for FTTH/FTTB services with a complete range of end-user ONT devices. These devices come with a diverse set of customer ports such as Fast Ethernet, Gigabit Ethernet, POTS, and WiFi (802.11n/ac) to address multiple deployment scenarios in the access.

Support Comprehensive OAMP Functions such as advanced fault, alarm and performance management tools based on standards such as ITU Y.1731 and IEEE 802.1ag. The tools are complemented by a powerful visual interface for alarm notifications, fault localization and SLA reporting.

Multiple deployment options are possible with 4 configurations available. 8 ports for 10Gbs capacity with 10GE SNI uplinks, plus AC / DC allows deployments in multi-tenant units, office closets, and remotes. The 16 Port option doubles the bandwidth for office buildings, housing developments, business parks and campuses.

A Flexible ONT Strategy is based upon standards from the Broadband Forum, including an G.988 OMCI along with TR-069's CPE WAN Management Protocol (CWMP) to provide support functions for auto-configuration, software or firmware image, software module, status, performance and diagnostics. These are combined with TR-156 architecture and service models, to allow for a multitude of service flexible and service specific ONTs in the Tejas TJ2100 family. This extends to multi-vendor interoperability when upgrading older networks.

Scalable Network Architectures are a clear requirement of any broadband service provider to tailor to geographical expansion, uptake increases and growth in consumer bandwidth usage. Our Ultra-Converged Broadband (UCB) solutions provide scaling from the TJ1400-1 through the TJ1400 18-Slot with 1 Tbs of capacity. With five options, the ability to extended networks as revenue opportunities arise, provide increased redundancy as market requirements change, to fit your real-estate constraints and be "Future Ready. Today" are unequalled.

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Tejas Networks Ultra Converged Broadband Solutions



Technical Specifications

GPON Interface Specifications

Transmission: ITU-T G.984
Line Rate: D/S, U/S - 2.5/1.2 Gbps
Connector: LC/PC
Wavelength: 1490 nm/1310 nm
Video: 1550 nm
Distance: 20km depending on split ratio

Interfaces to Ethernet Switch

8 port: 2x10GE+4x1GE
16 port: 4x10G+2x1GE(o)+2x1GE(e/o)
Pluggable SFP/SFP+ for Ethernet ports

Ethernet Switching

IEEE 802.1Q, IEEE 802.1ad
IGMP Snooping, v1/v2/v3
IGMP Proxy
256 multicast entries per LAN port
Traffic Policing
QoS (DSCP/802.1p)
Multicast VLAN registration
MAC learning, MAC limiting
DHCP relay Agent with Option-82
LLDP*

MPLS-TP Provisioning and OAM*

MPLS-TP OAM RFC5860
BFD based Fault OAM
LSP Ping and Traceroute (RFC6426)
PW Ping
On demand LM/DM at Tunnel/PW level
On demand LM/DM at VLAN level
Y.1731/802.1ag based CFM OAM
Up-MEP
Link integrity (LLCF/LLR)

L3 Features*

Static IP Route, DNS Proxy
IP i/f on VLAN (IRB)
Ping, Traceroute w. SourceIP

Network Protection & Testing

STP, RSTP (IEEE 802.1D-2004)
Link Aggregation Group (LAG)
Ethernet Ring Protection ITU-T G.8032
Type-B Protection with <1s switching time.
1:1 bidirectional Linear Protection LSP (RFC6378) *
MPLS-TP Ring / Mesh*
Port mirroring and loopback*

Timing / Synchronization

16 port Configuration:
Stratum 3 Clock, SyncE*
ToD, 1pps, and 10MHz*
1588v2 BC/TC with ToD interface*

Power Supply (optional redundancy)

-36V to -60V DC, 120V AC, 60Hz, PSU Redundancy
Mixed AC/DC configuration available
8 Port configuration - 70 W (nominal), 95 W (max)
16 Port configuration - 82 W (nominal), 110 W (max)

Environmental

Operating Temperature:
8 Port and 16 Port standard temp: 0C to 60C
16 Port temperature hardened: -40C to +65C
Relative Humidity: 10% to 90%, non condensing
CE, ROHS Compliant
ETSI/EN 300386, EN 55022 Class A, FCC Part 15 Class A

Dimensions (W x H x D)

444 mm x 44 mm x 299 mm
19" and 23" rack mount options

Related Products

TJ2100 ONT Family
TJ1400 7-Slot 2U UCB up to 200G
TJ1400 13-Slot 4U UCB up to 260G
TJ1400 18-Slot 7U UCB up to 1 Tbs
TJ5500 Network Management System

**upcoming release specifications subject to change without notice*



Software-Enabled
Transformation

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