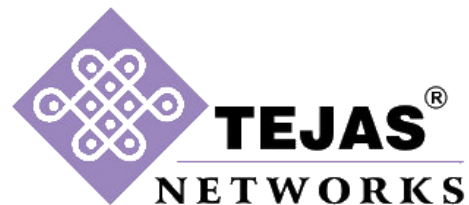# TJ1400-1 OLT with ONT20PS/20PS4

TEJAS® NETWORKS

Software Enabled Transformation

Features

- TJ1400-1 is a comprehensive access solution, deployed as GPON OLT.

- TJ1400-1 is available in 8xGPON ports.

Supported features

- Functionality: GPON OLT with L2 switch.

- Switching capacity: 100G.

- Compact: 1RU platform with 1 expansion/add-on slot.

- Flexible SNI, 2x1GbE+4x10GbE (or) 4x1GbE+2x10GbE per chassis (user configurable).

- 1+1 redundancy for power supply unit.

NOTE: Only AC+AC Power supply provided at rear end of the TJ1400-1 chassis.

- 1024 terminal connections possible using 1:64 split.

- Integrated with backhaul to reduce equipment footprint and reduce TCO (Total cost of ownership).

Features

- 16 GEM ports per GPON port.

- 1024 allocations per PON port and 4096 allocation IDs per card.

- Management Integration with EMS directly managing ONTs with OMCI commands.

- Dynamic Bandwidth Allocation (DBA) for upstream traffic, Advanced Encryption Standard (AES) 128 bit for downstream traffic.

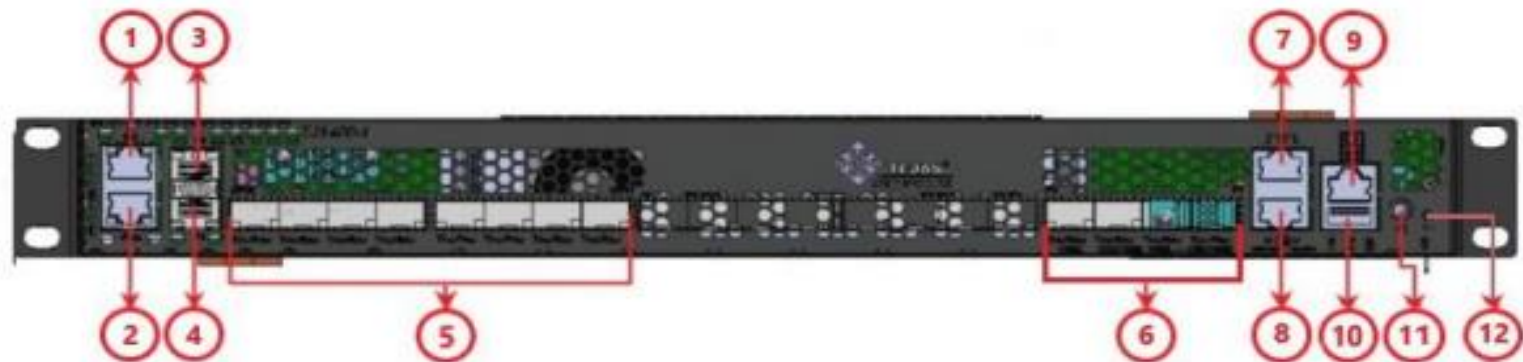- Forward Error Correction (FEC) for upstream and downstream traffic.

Software Enabled Transformation

Architecture

FIG: Front Panel

Height	• 44mm
Width	• 444mm • 481.2mm with mount angles
Depth	• 395mm • 423.6mm with connectors and handles.

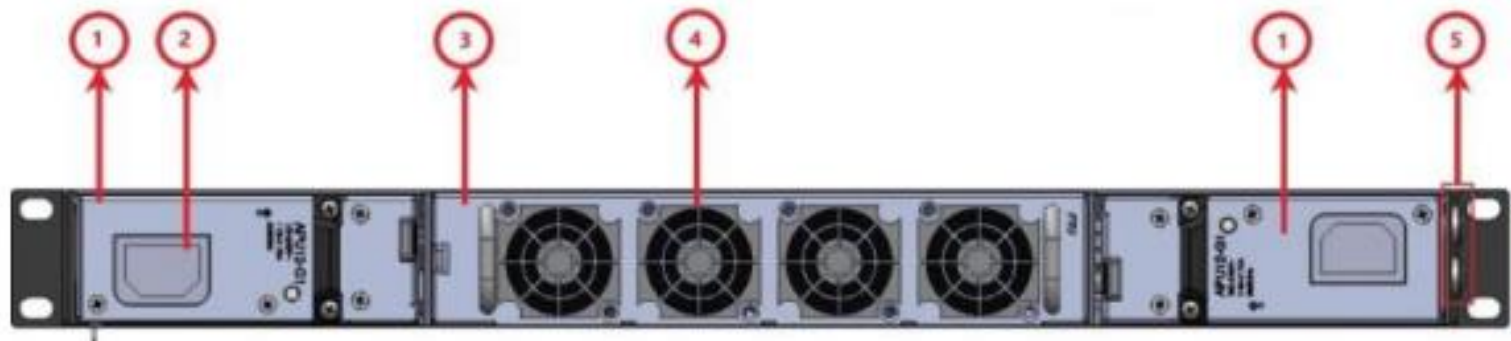|			
1	NMS port	7	BITS Data port
2	LCT port	8	ToD port
3	1G port	9	Alarm In and Alarm Out
4	1G port	10	USB port
5	Ports (GP8 - GP1)	11	DIAG port
6	Ports (P4-P1) : P4 - 10GE port 　　　　　　P3 - 1GE/10GE port 　　　　　　P2 - 10GE port 　　　　　　P1 - 1GE/10GE port	12	Reset switch

Software Enabled Transformation

Architecture

FIG: Back Panel

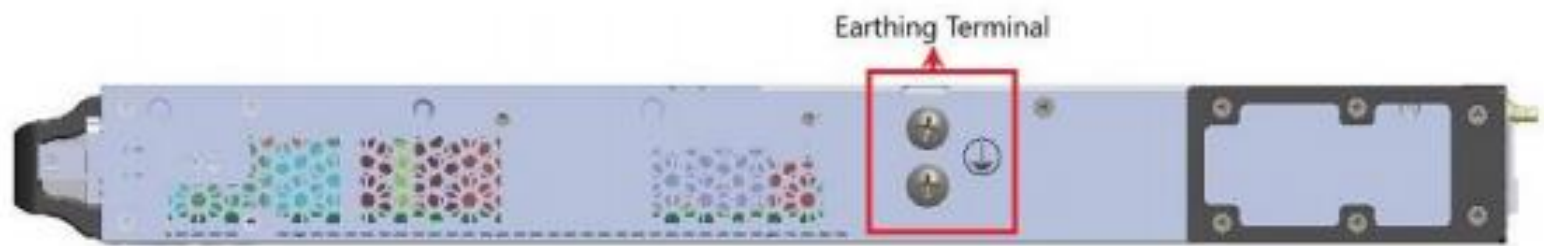| 1	Power supply unit (APU12-G1)	4	Fan in FTU (4 nos)
2	Power socket	5	Earthing terminal
3	Fan tray unit (FTU-G1)		

FIG: Earth Terminal

Software Enabled Transformation
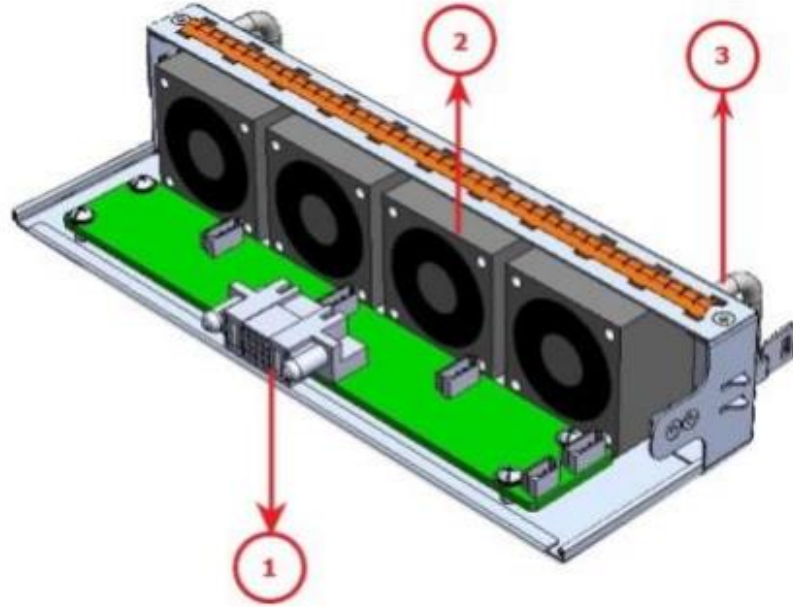
AC Power supply unit – APU12-G1

Operational Specifications

- The power supply unit APU12-G1 for TJ1400 converts the AC input to 12V DC output. The power supply supports a maximum output of 125W continuous at 12V.

- Functional protection

APU12-G1 card has the following protections:

- Inrush current limit.

- Surge.

- Input Under-voltage and Over-voltage.

- Output Over-Current protection.
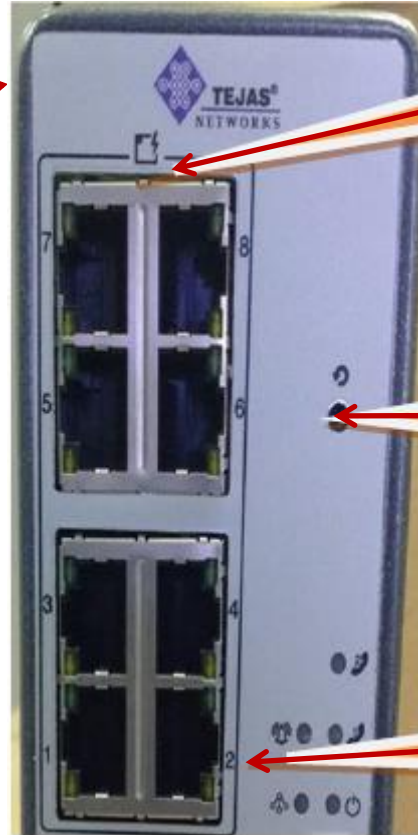
Fan tray unit - FTU-G1

1	Connector
2	Fan
3	Handle

FTU-G1 unit is designed to cool the system by 5°C. It supports the following:

- Four fans.

- Fuse on each fan power supply isolates any failed fan from other fans.

- Fan speed monitoring and control through software, based on the temperature sensing.

- Temperature monitoring of the airflow path.

- Field replaceable unit.

- Hot swap capability.

- MTBF per fan of 70,000 hours.

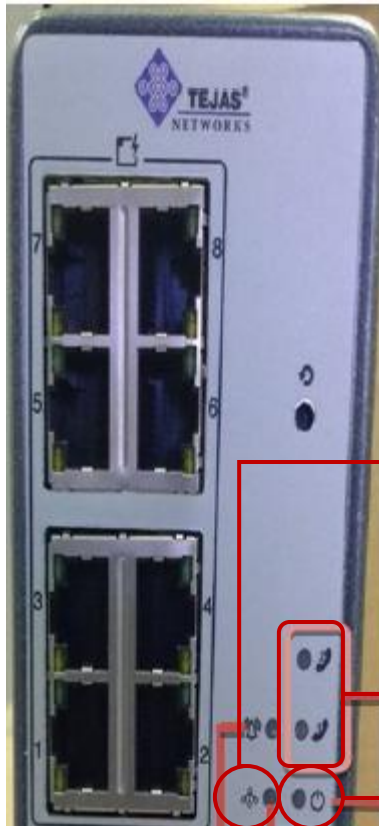*NOTE: An alarm is raised if any of the FTU fan fails.*

ONT20PS

Symbol For Ethernet with PoE.
All ports support PoE or PoE+
Max POE power-120W

Push button Switch

Ethernet Port Number:
8 ports with data rates
10/100/1000 Mbps each
are available

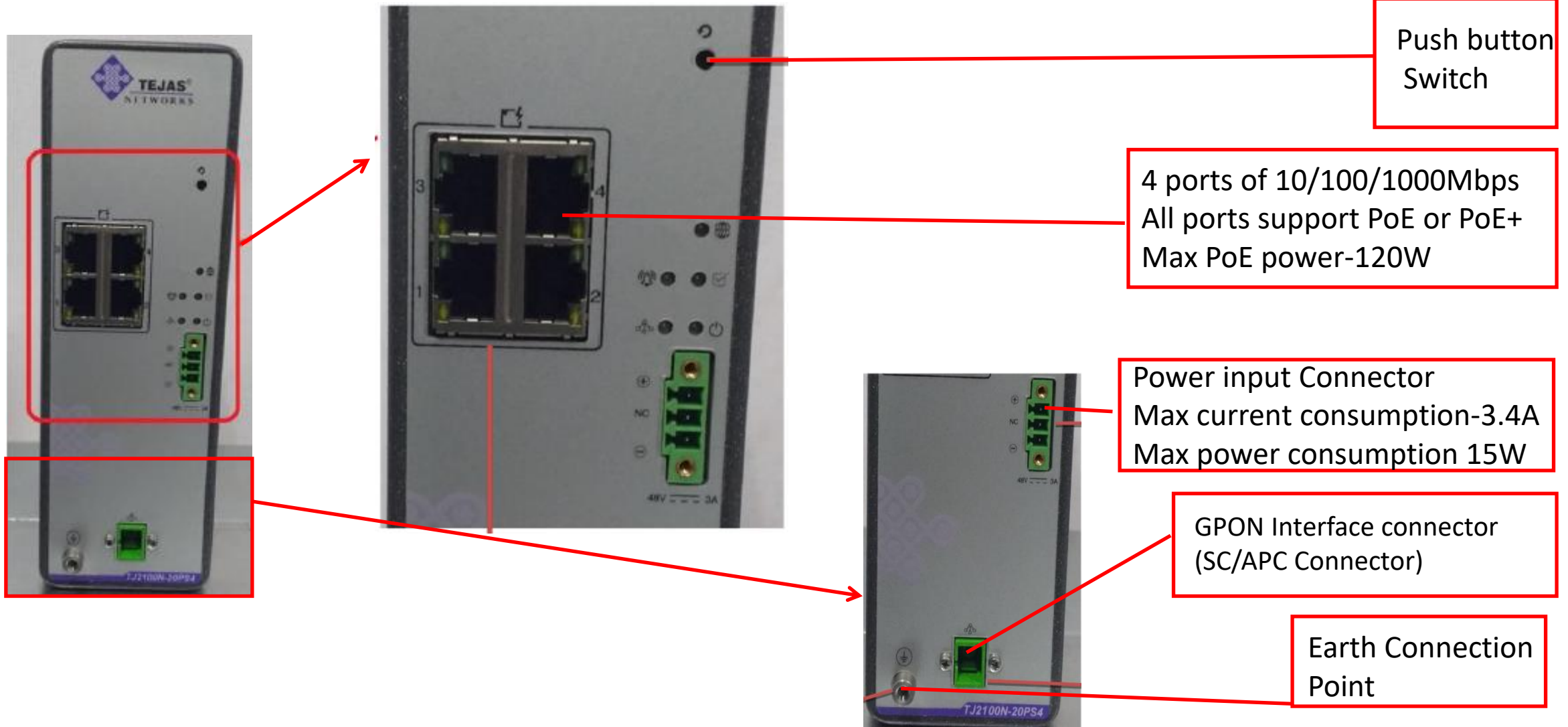Earthing point

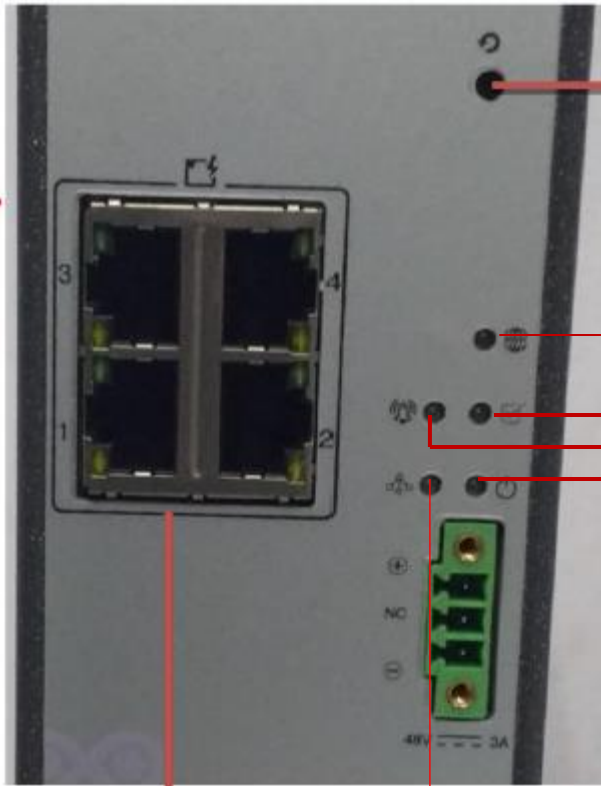# ONT20PS LED status

POTS port status indication

POTS port status indication
OFF-VoIP Port is not enabled/ Receiver is on-hook
GREEN - VoIP Port is not enabled/ Receiver is OFF-hook

Power LED
OFF - ONT's power is down
GREEN - ONT is powered ON

TJ2100N-20PS4

Push button Switch

4 ports of 10/100/1000Mbps
All ports support PoE or PoE+
Max PoE power-120W

Power input Connector
Max current consumption-3.4A
Max power consumption 15W

GPON Interface connector
(SC/APC Connector)

Earth Connection Point

TJ2100N-20PS4 LED status

Internet Status LED
OFF - HSI is not available
GREEN - HSI is available

Board status LED
OFF - Board is not booted or Not in known operating state
GREEN - Board is booted or in known operating state

Power LED
OFF - ONT's power is down
GREEN -ONT is powered ON

Alarm Indication
RED -Alarm is present
GREEN -No Alarm is present

PoN Port Status Indication
OFF -PoN Link is down
GREEN-PoN Link is up and it is ONT is in Operation state (O5)

THANK YOU

Software Enabled Transformation