

# TJ2100N-ONT32S

## XGSPON SFP+ ONT Stick



### DATA SHEET



### Product Highlights

- **Standard ITU-T G.9807.1, ITU-T G.988 compliant XGS-PON SFP+ ONT**
- **Compliant to SFP+ MSA**
- **Hardened for indoor and protected outdoor installations**
- **Capable of SyncE, 1588v2**

## Key Features and Benefits

### Overview:

Tejas offers a series of advanced GPON and XGS-PON ONT elements designed for next-generation Optical Access networks. These can be deployed in FTTH (Fiber-to-the-Home) and FTTB (Fiber-to-the-Building) scenarios. It addresses the rapidly growing service provider needs for flexible, high-capacity fixed-line broadband solutions to support emerging high bandwidth video applications (e.g., IPTV, Mobile backhaul, MTU, VOD) in enterprise, residential deployments, aggregation of backhaul traffic from LTE cell sites, enterprise VPN Services and SD-WAN networks based on NFV paradigm.

Tejas has a full XGS-PON solution that includes TJ1400 OLT (Optical Line Terminal) and TJ2100N ONT (Optical Network Terminal) platforms. TJ2100N is a versatile product available in multiple flavors supporting XGS-PON interfaces.

TJ2100N-32S is compliant to ITU-T G.9807.1, G.988 GPON OMCI compliant and IEEE 1588v2 8275.1 T-BC with G.8273.2 Class B performance, ToD/1PPS. Supports "Plug-and-play" configuration via OLT, including remote SW upgrades.

This ONT integrates a bi-directional optical transceiver function and GPON MAC function. By being plugged into the customer premise equipment (CPE) with standard SFP port directly, the ONT provides a symmetric 10Gbps ethernet service to the CPE without requiring separate power supply.

TJ2100N-32S supports a sophisticated ONT management system, including alarms, provisioning, DHCP and IGMP functions for a stand-alone IPTV solution at the ONT and can be managed from the OLT over the GPON using G.988 OMCI.

TJ2100N-32S fits seamlessly into existing communications equipment, providing service providers with a smooth upgrade to XGSPON and vastly decreases the installation costs of deploying fiber access in MDUs and enables service providers to improve their revenue streams while decreasing OPEX.

## Technical Specifications

### XGS-PON Interface Specifications

SC/UPC Connector, Integrated Diplexer Transceiver  
Compliant with ITU-T G.9807.1 XGS-PON (N1/N2)  
Uplink: XGS-PON  
Maximum Transmission rate :  
Upstream 9.953Gbps,  
Downstream 9.953Gbps  
Advanced Encryption Standard (AES) in downstream  
Transmission Distance: 20km between closest and farthest ONT from OLT, as per XGS-PON standards

### Ethernet and other interfaces

SFP+ XFI interface  
SyncE  
IPv4/6 over Ethernet  
Support Jumbo frames up to 9K  
VLAN-translation, modification and transparency  
Support of 8K MAC entries  
Support of multicast IGMP snooping  
IEEE 802.1ag (CFM) and ITU Y.1731

### OAM

Management: G.988 (OMCI)  
S/N and registration ID ONT authentication  
Remote software image download  
Ready for Rogue ONT detection and reporting  
64bit PM counters on GEM port and Ethernet interfaces  
Connectivity Fault Management (CFM) according to IEEE 802.1ag / ITU Y.1731

### Power

3.3V SFP+ XFI interface  
Power consumption: typical < 2W, worst case (85°C)

### Environmental Specifications

Operating Temperature: -40°C to +85°C  
Humidity: 5% to 85%

### Regulatory Compliances

RoHS: 2011/65/EU(6) and 2015/863/EU(10)  
FCC part 15 class B, EN 300 386 and EN 55032:2015,  
CE: Certification/mark, EN55032, EN55035, IEC62368-1, UL 62368-1 certified

### Ordering Information

Model	Description
TJ2100N-32S	XGSPON SFP+ ONT

*Specifications subjects to change without notice*



Software-Enabled Transformation

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