

**ENTRA®**

## SF-50X 50G-PON Remote OLT

### Product Overview

The Entra SF-50X is an environmentally hardened remote optical line terminal (R-OLT) that brings scalable PON capacity closer to subscribers. Operators can deploy 10G services today and evolve to 50G-PON by upgrading the port capabilities instead of replacing the R-OLT, protecting their network investments and simplifying future upgrades.

It supports multiple Tri-Mode 50G/10G/2.5G or 50G/10G/1G All-PON™ ports or up to eight XGS-PON or 10G-EPON ports using dual-density optics.

With DPoE and ITU support and centralized management through the Entra Access Controller or using the vPON Manager for ITU-T systems, the SF-50X gives service providers flexible FTTP provisioning solutions for residential, business, MDU, and network-extension applications.



### Product Features



#### Flexible PON configurations

Supports multiple Tri-Mode Combo PON, dual XGS-PON, or dual 10G-EPON deployments



#### High-capacity uplinks

NNI Uplinks via 10/25G and 100G/400G network interfaces



#### Double-density capacity

Support up to eight 10G PON connections using multiple SFP-DD optical interfaces



#### Managed Device

Easily managed by the Entra Access Controller or vPON provisioning solution options



#### Investment protection

Deploy 10G today and evolve to 50G-PON by optics upgrade instead of node replacement



#### Seamless Integration

DPoE and ITU support and Open Network Ecosystem simplifies integration with existing service provider PON network deployments

### Technical highlights

- Multiple SFP-DD All-PON interfaces
  - Four 50G+10G+1G All-PON ports
  - Eight XGS-PON or 10G-EPON ports using dual-density optics
- Multiple uplink options
- Field-upgradable from 10G to 50G-PON
- DPoE and ITU-T provisioning support
- Centralized Entra Access Controller or vPON Manager
- Field-replaceable modules and power supplies
- Environmentally hardened for outside-plant deployments
- Strand, wall, and pedestal mounting options

## SF-50X Node Specifications

| Physical                  |                                                                                                                        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------|
| Height                    | 297 mm (11.7 in)                                                                                                       |
| Width                     | 527 mm (20.7 in)                                                                                                       |
| Depth                     | 238 mm (9.4 in)                                                                                                        |
| Weight                    | 18.22 kg (40.12 lbs.)                                                                                                  |
| Operating Environment     |                                                                                                                        |
| Temperature               | -40 to 60 C (-40 to 140 F)                                                                                             |
| Relative Humidity         | 5% to 95%, noncondensing                                                                                               |
| Altitude                  | -60 m to 4000 m (-196.9 ft to 13,123.4 ft)                                                                             |
| Storage Environment       |                                                                                                                        |
| Temperature               | -40 to 70 C (-40 to 158 F)                                                                                             |
| Relative Humidity         | 5% to 95%, noncondensing                                                                                               |
| Altitude                  | -60 m to 4000 m (-196.9 ft to 13,123.4 ft)                                                                             |
| Installation              |                                                                                                                        |
| Mounting Options          | Horizontal strand or pedestal mounting<br>Wall or pole mounting with mounting bracket                                  |
| Power Requirements        |                                                                                                                        |
| Input Voltage             | 44 V to 100 V AC, nominal 90/60 V AC quasi-square wave                                                                 |
| Power Consumption         | 75 W typical, 85 W maximum<br>Coax line-powered using left or right power port and a pin connector with 5/8-24 housing |
| Interfaces                |                                                                                                                        |
| Subscriber Ports          | 4 SFP-DD All-PON ports                                                                                                 |
| Networks Ports            | 2 SFP28 10/25 Gb/s ports<br>1 QSFP28 40/100 Gb/s port                                                                  |
| Supported Optical Modules |                                                                                                                        |
| SFP-DD for Subscriber     | Tri-Mode 50G/10G/1G ITU-PON<br>Tri-Mode 50G ITU/10G EPON/1G EPON<br>2x10G XGSPON or EPON                               |
| SFP28 Uplink              | SR, LR, ER, ZR, DWDM-ZR                                                                                                |
| QSFP28 Uplink             | LWDM<br>Coarse wavelength division multiplexing (CWDM): ZR<br>Dense wavelength division multiplexing (DWDM): ZR        |

| Reliability                      |                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mean Time Between Failure (MTBF) | 101,295 hr at 60 C (140 F) and 439,318 hr at 25 C (77 F) per Telcordia SR-332 Issue 3 methodology                                                                                               |
| Regulatory Standards Compliance  |                                                                                                                                                                                                 |
| EMC (Immunity/Emissions)         | EN 55024<br>EN 55032<br>EN 55035<br>EN 61000-3-2<br>EN 61000-3-3<br>FCC PART 15 SUBPART B<br>VCCI CISPR 32                                                                                      |
| Safety                           | IEC/EN 60950-1<br>ANSI/UL 60950-1<br>CAN/CSA C22.2 No. 60950-1-07<br>IEC/EN 62368-1<br>ANSI/UL 62368-1<br>CAN/CSA C22.2 No. 62368-1<br>EN 60825-1 (ONLY for SFPs)<br>EN 60825-2 (ONLY for SFPs) |
| Outdoor Use                      | IEC 60950-22                                                                                                                                                                                    |
| Corrosion Resistance             | GR-2873-CORE<br>ASTM B117                                                                                                                                                                       |
| IP Rating                        | IP67                                                                                                                                                                                            |
| Surge                            | ANSI/SCTE 81<br>IEEE C61.42<br>IEEE C62.41                                                                                                                                                      |
| Environmental                    | IEC/EN 63000<br><br>Hazardous substances: RoHS Directive 2011/65/EC<br><br>Waste Electrical and Electronic Equipment: WEEE Directive 2012/19/EU                                                 |