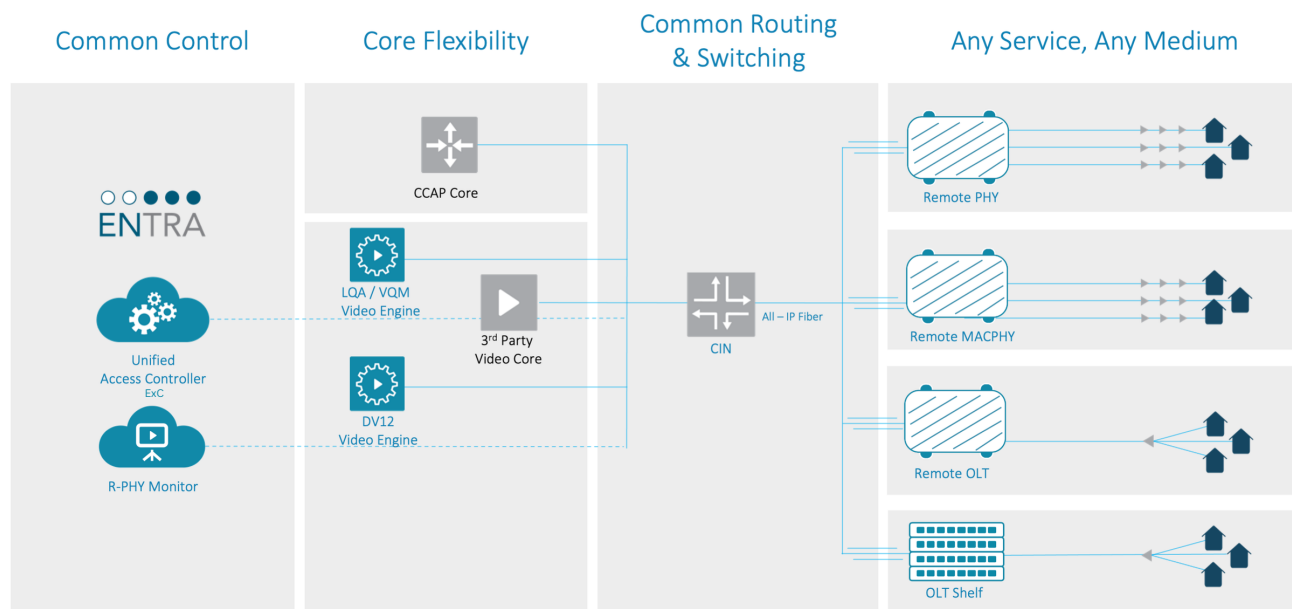


# EXS1610 All-PON Shelf

Fiber Access Optical Line Terminal (OLT) Shelf

The **Entra**® Distributed Access Platform supports all dominant distributed access architectures and facilitates the delivery of existing video and data services over Fiber, HFC, and direct Ethernet connections.



## Entra® EXS1610 All-PON™ Access 1RU, 16-port OLT

Entra shelf OLT is an All-PON™ Access OLT that simultaneously supports ITU-T XGS-PON, GPON, Combo G/XGS-PON, IEEE 10G-EPON, EPON, Combo GE/10GE PON, and 10G Active Ethernet technologies on its User-Network Interface (UNI) Ports. The carrier-grade temperature-hardened compact hardware design gives service providers deployment flexibility for diverse environments.

Service providers can shorten time to market and future-proof their access networks without delays related to resolving IOP issues.

Entra EXS1610 All-PON™ Access 1RU, 16-port OLT



## Highlights

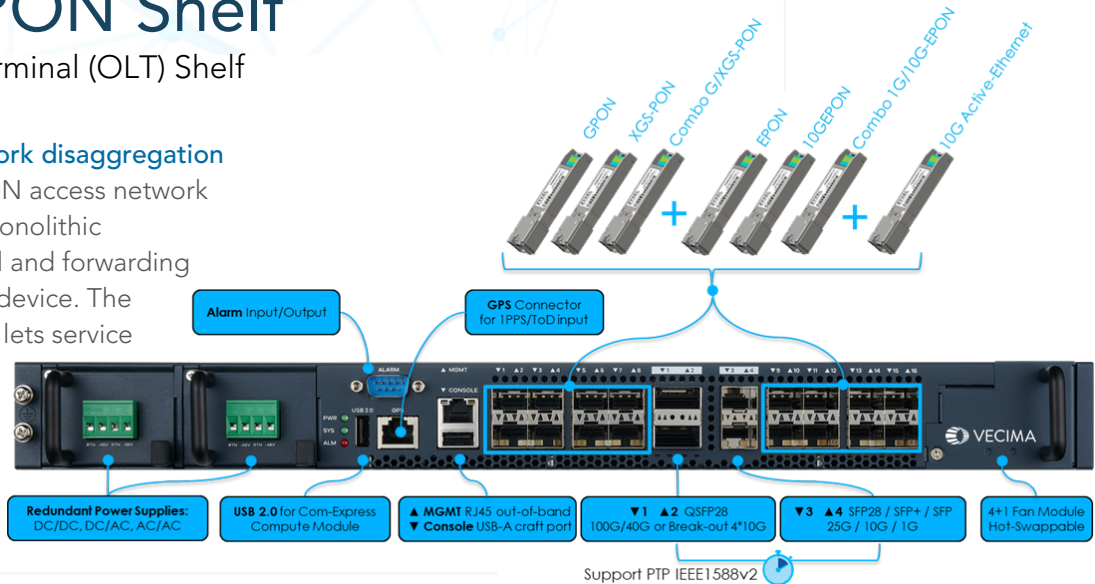
- 16 x PON ports: XGS-PON/GPON (Combo PON) and 1G/10G-EPON
- Uplink optics: 2 x 100/40G & 2 x 25/10G with broad third-party optics support
- Multi-vendor optical network terminal (ONT) interoperability
- <300mm depth designed for ANSI and ETSI Rack
- 1+1 AC or DC power redundancy
- Temperature-hardened shelf for OSP deployments

# EXS1610 All-PON Shelf

## Fiber Access Optical Line Terminal (OLT) Shelf

### Embrace the benefits of network disaggregation

Entra shelf OLTs allow your PON access network to evolve beyond traditional monolithic architectures where the control and forwarding plane are hosted on the same device. The disaggregated access network lets service providers control multiple OLT shelves as if they were cards in a chassis while scaling and customizing services based on customer needs.



### Maximized flexibility for versatile deployment environments

Designed to tolerate a wide temperature range, the Entra OLT Shelf can be deployed anywhere from data centers to remote cabinets. The carrier-class compact design with 1 RU height and 260mm depth, ETSI Rack compliance, and all-front access make Vecima shelf OLTs easy to install for an array of deployment scenarios.

Hardware specifications	
All-PON™ Ports	16 x All-PON™ Ports 2 x 100G/40G QSFP28 ports 2 x 25G/10G SFP28 ports 1 x UART console port over USB 2.0 1 x RJ-45 OOB port 1000-BaseT 1 x USB 2.0 port for x86 COM-E 1 x 9-pin alarm interface (4 x inputs & 1 x output) 1 x RJ-45 connector (RS-422 input for GPS receiver)

Supported PON Transceivers	ITU-T GPON SFP ITU-T XGS-PON SFP+ ITU-T Combo G/XGS-PON SFP+ IEEE GEAPON SFP IEEE 10GE-PON SFP+ IEEE Combo 1G/10G-EPON 10G Active-Ethernet
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Power module
Dual-redundant power module slots AC/DC dual-power supply AC power input: 100 to 240 V AC DC power input: -38.4 to -72 V DC Power consumption: 290 Watts max

Fan tray and Module
Removable fan tray 4+1 redundant fans & tray Hot-Swappable Fan speed controlled by automatic temperature detection or user configurable Side-to-side, left-to-right airflow

Timing-Synchronization
PTP IEEE 1588v2 Sync-E, ToD, 1PPS Class C Timing Support

### Entra All-PON™ technology

Entra shelf OLTs have implemented PON technology in all its User-Network Interface (UNI) ports. Entra's PON solution brings unprecedented flexibility to support multiple technologies simultaneously. When the OLT is configured to operate in ITU-T standard mode, the ISP can connect GPON, XGS-PON, or Combo GPON/XGS-PON transceivers to the OLT UNI ports. When the OLT is configured to operate under IEEE standard modes, the ISP can connect EPON, 10G-EPON, Combo 1G/10G-EPON, or 10G Active - Ethernet transceivers to the OLT UNI ports. EXS 1610 can be configured in GPON/XGS-PON standard mode or can be configured on 10G EPON IEEE standard mode on boot.

Physical Dimensions	
Shelf	Shelf dimensions (WxDxH): 440 x 260 x 44.5 mm (17.3" x 10.2" x 1.7") Item weight: 5.1 kg (11.24 lb.)

Environmentals	
Operational environment	Temperature: -40°C to 65°C (-40°F to 149°F) Humidity: 10% to 95% RH (non-condensing)

Certifications
EN 62368-1:2014+A11:2017 IEC 62368-1:2014 CAN/CSA C22.2 No. 62368-1-14 ANSI/UL 62368-1, 2nd Ed. FCC part 15 Subpart B (Class A) ICES-003 Issue 6 EN 55032:2015 / AC:2016 EN 55024:2010 / A1:2015 ETSI 300 386 V2.1.1 AS/NZS CISPR 32:2013 EN 61000-3-2:2014 EN 61000-3-3:2013