

FEATURES

10G EPON R-OLT

- Support for high-bandwidth, 10G EPON-based services for brownfield and greenfield networks
- 1G EPON, Turbo EPON and 10G EPON subscriber access via two pluggable XFP ports
- Scales to 128 subscriber ONUs per subscriberside port (256 total ONUs per module)
- 10 Gbps standard uplink applications via two pluggable, network-side SFP+ optical ports
- Standard, long-haul 10G CWDM, DWDM and Bi-Di uplinks
- Supports co-existence with multiple access technologies RF/HFC, RFoG overlay, and DAA in a single enclosure
- Optimized for outside plant deployment in cable nodes and virtual hubs

The PON Evo™ 200E Series 10G EPON (Remote Optical Line Terminal) R-OLT module for CommScope HFC Nodes and VHubs enables cable operators to monetize their existing network infrastructure by adding high-bandwidth, 10G EPON-based services to their legacy DOCSIS® HFC network. The 200E Series R-OLT lowers the cost of deploying PON, saves space and power by using existing network assets, and drives PON based services through the last mile, enabling the migration to FTTX through a seamless coexistence of RF/HFC, RFoG overlay, and DAA technologies in a single enclosure. The module supports nodes with coexistent RF/PON DAA/PON or VHubs with RFPON (RFoG+PON overlay) or PON-only services.

The 200E Series R-OLT incorporates full traffic management and PON MAC/PHY capabilities in a compact module. It utilizes standard, long-haul 10GE uplinks, including CWDM and DWDM options, to connect to the Leaf switch/router in the Converged Interconnect Network (CIN). This capability enables cable operators to utilize their transport backhaul fiber resources efficiently while extending the deployment of FTTX to serve customers at distances well beyond the typical 20 km reach of centralized, chassis-based PON architectures.

For subscriber access, the 200E Series R-OLT includes two XFP ports, each supporting coexistent symmetric 1G EPON, 2/1G Turbo EPON, and 10/10G EPON in co-existence mode. Each PON port fully supports interoperability via DPoE V2.0 OAM and supports 128 ONUs for a total of 256 subscriber ONUs per R-OLT module.

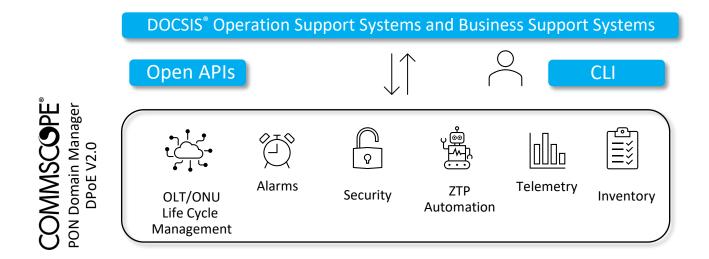


CommScope PON Evo 200E Series R-OLT

Architecture

The 200E Series R-OLT works with CommScope's PON Domain Manager, a DPoE V2.0 virtualized controller that provides the following functions:

- Seamless integration of the management and assurance of OLTs resulting in a fully managed service deployment using existing DOCSIS operational production processes and procedures.
- Full lifecycle management of multiple OLTs from initial deployment through the application of services and subscriber provisioning, and integration into monitoring and network operational support systems.
- Zero-touch onboarding and provisioning of both OLTs and ONTs.
- Standards-based integration into northbound DOCSIS orchestration and telemetry gathering applications.



SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions, H x W x L	3.81 cm x 10.16 cm x 16.51 cm (1.5 in x 4.0 in x 6.5 in)
Weight	1.293 kg (2.85 lb)
Ports, Network Side	
	LC Duplex: Two (2) network-side optical ports (NSI Port 0 and NSI Port 1) support single-mode SFP+ (10 Gbps) cages for standard uplink applications (CommScope qualified SFP+ transceivers purchased separately)
Ports, Subscriber Side	
	Two (2) simplex bidirectional IEEE 802.3av 10G EPON subscriber-side optical XFP plug-in ports (PON 0 and PON 1) for 10G/10G (10GBASE-PR30), 10G/1G (10/1GBASE-PR30), and 1G/1G (1000BASE-PX20) optical transceiver support Each port supports up to 128 subscriber ONUs per port (256 total per module, using external splitters)
Provision and Monitoring	
	OLT Manager application: Operator-based virtualized R-OLT lifecycle manager and DPoE V2.0 provisioning system interface for Optical Network Units (ONUs)
Environment	
Operating Temperature	-40° to +60°C (-40° to 140°F)
Storage Temperature	-40° to +60° (-40° to 140°F)
Humidity	5%–95%, non-condensing
Powering	
Power Requirements	+24VDC and +5VDC, supplied by node or VHub platform PS4101 or PS4102 power supplies (required), depending on the node/VHub platform used
Power Consumption	35.5 W (max), including two (2) XFP and two (2) SFP+ transceivers operating at 10/10 or 10/1 Gbps
Compliance	
Electrical Safety Standards ¹	CAN/CSA-C22.2 No. 60950-1-07+Amd 1+Amd 2 CAN/CSA-C22.2 No.60950-22-07+Gl1 (R2012) EN 60950-1:2006+A11+A1+A12+A2 EN 60950-2:2014 2006+A11 IEC 60950-1:2005+A1+A2 IEC 60950-22:2005 IEC/EN 60825-1: IEC/EN 60825-2:2004+A1+A2 UL 60950-1-07+A1+A2 UL 60950-22: 2007 R12.11
Electromagnetic Compatibility (EMC)	CFR 47 Part 15, Subpart B, Class A CISPR 24 IEC/EN 55024 CISPR 32 IEC/EN 55032 VCCI A VCCI B VCCI V-32-1
Regulatory	Designed, manufactured, and/or distributed under the ISO 9001:2015 quality management system RoHS compliant UK-RoHS compliant
LED Indicators	
PWR	Dark = Module OFF (not receiving power) Green = Module ON (receiving power)
PON	Refer to XE4202M Physical Installation Guide (p/n TM 1512184) for LED indicator colors and definitions
NOTE:	

NOTE

^{1.} Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

ORDERING INFORMATION

Model Name	Part Number	Description
		Remote Optical Line Terminal
ROLT-XE202-CEX	1514003	10G EPON Remote Optical Line Terminal (R-OLT) for NH series nodes and VHub/UVHubs in a triple wide module. Two pluggable network uplink interfaces for 10GigE SFP+ and two pluggable access interfaces for 10G EPON XFPs. Network interface SFP+ and 10G EPON XFP plug-in transceiver modules must be purchased separately. Module orders include access to download OLT Manager DPoE V2.0 application and documentation.
		PON XFP Transceivers
N/A	1000940	10G EPON XFP Optical Transceiver Module for R-OLT interface. 10G/10G (10GBASE-PR30), 10G/1G (10/1GBASE-PRX30), 2G/1G (Turbo Mode), and 1G/1G (1000BASE-PX20)40 $^{\circ}$ to +85 $^{\circ}$ C (-40 $^{\circ}$ to +194 $^{\circ}$ F) industrial temperature rated. Extended industrial temperature XFP for NC4000 RF Node applications.
N/A	1001310	10G EPON XFP Optical Transceiver Module for R-OLT interface. 10G/10G (10GBASE-PR30), 10G/1G (10/1GBASE-PRX30), 2G/1G (Turbo Mode), and 1G/1G (1000BASE-PX20)40 $^{\circ}$ to +85 $^{\circ}$ C (-40 $^{\circ}$ to +194 $^{\circ}$ F) industrial temperature rated. Extended industrial temperature XFP for NC4000 RF Node applications.
		Uplink DWDM SFP+ Transceivers
TTD4540-xx-PI	N/A	SFP+ Transceiver, 10 Gbps, ITU channel xx (20–61), LC/UPS, 40km, -40° to +95°C (-40° to +203°F)
TTD4580-xx-PI	N/A	SFP+ Transceiver, 10 Gbps, ITU channel xx (20–61), LC/UPS, 80km, -40° to +95°C (-40° to +203°F)
		Uplink CWDM SFP+ Transceivers
TTCxxxx-TL40	N/A	SFP+ Transceiver, 10 Gbps, xxxx = 8 CWDM wavelengths (1470–1610 nm), LC/UPS, 40 km, -40° to +95°C (-40° to +203°F)
TTCxxxx-TL80	N/A	SFP+ Transceiver, 10 Gbps, xxxx = 8 CWDM wavelengths (1470–1610 nm), LC/UPS, 80 km, -40° to $+95$ °C (-40° to $+203$ °F)
		Uplink Bi-Di SFP+ Transceivers
TTA1270-BIDI10	N/A	10 Gbps, 1270 nm, SFP+, LC/UPC, 10 km, -40° to +95°C
TTA1270-BIDI40	N/A	10 Gbps, 1270 nm, SFP+, LC/UPC, 40 km, -40° to +95°C
TTA1330-BIDI10	N/A	10 Gbps, 1330 nm, SFP+, LC/UPC, 10 km, -40° to +95°C
TTA1330-BIDI40	N/A	10 Gbps, 1330 nm, SFP+, LC/UPC, 40 km, -40° to +95°C

Contact Customer Care for product information and sales:

United States: 888-944-4357International: +1-215-323-2345





Note: Specifications are subject to change without notice.

Copyright Statement: © 2025 CommScope, LLC. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. DOCSIS is a registered trademark of Cable Television Labs, Inc. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. 7863669_200E Series_R-OLT_RevA