

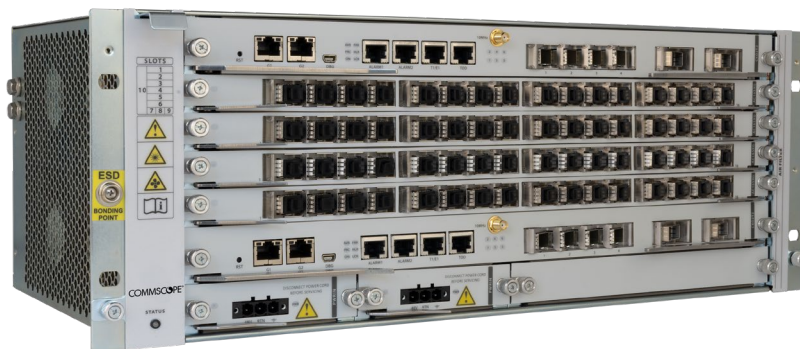
FEATURES

- Ultra-High Bandwidth:
 - Higher Speed PON Ready (50G-PON)
 - Up to 400 Gbps NNI Access
 - Up to 400 Gbps Slot backplane
 - N x 100GE Uplink Interfaces
 - GPON, NG-PON2, XGS-PON
 - Active Ethernet (ptp) 10G/1G
- High Availability:
 - Commons redundancy (Power/Switch Fabric/Uplinks)
 - LAG/LACP Uplink Protection
 - Type B protection for the ODN domain
- Virtualization and Slicing:
 - Seamless migration toward a fully Virtualized network environment
 - Several virtual network operators can share infrastructure

The PON Evo™ 6400 Series OLT is a next-generation OLT system. Part of CommScope's central office connectivity portfolio, the 6400 series provides ultra-high bandwidth services across medium-density geographic areas, supporting rural and corporate environments to comprehensively address the entire access network. It serves both B2C and B2B markets, meeting the needs of Residential, Business, and Mobile customer segments.

The PON Evo 6400 Series OLT complies with all the relevant ITU technology standards, such as GPON (ITU-T G.984.x) and XGS-PON (ITU-T G.9807.1), using Multi-PON-Module (MPM) optical interfaces. NG-PON2 (ITU-T G.989.x) and next-generation 25/50G PON (ITU-T G.hsp) technologies are supported by the chassis, thus ensuring future-proof investments. The solution also provides active Ethernet Point-to-Point (P2P) connectivity with 1GE and 10GE data rates over a single fiber, covering dedicated P2P network scenarios.

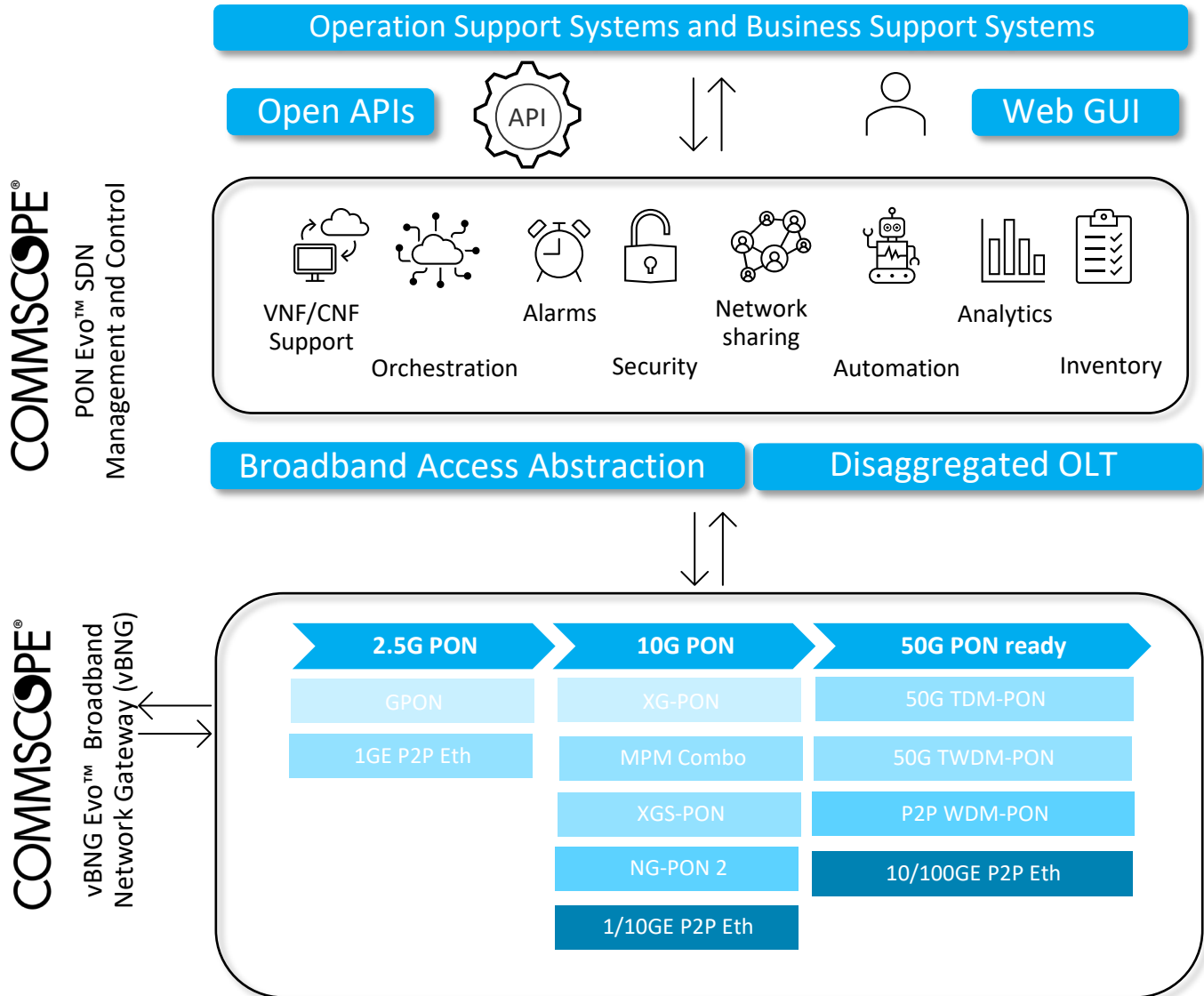
Each PON port may serve up to 128 Optical Network Terminals (ONTs), assuming a maximum splitting ratio of 1:128.



CommScope PON Evo 6400 Series OLT

Architecture

The PON Evo 6400 Series OLT is carrier-grade equipment with high availability performance levels and reliability achieved through common element protection, featuring redundant Power Feed, Switching Fabric processing and cooling components. Type B protection is available for the subscriber side, while for the network side, star and ring topologies are available with multiple 10GE and/or 100GE/400GE optical interfaces supported by the Link Aggregation Control Protocol (LAG/LACP); these interfaces enable dual homing connections towards aggregation network. The Ethernet Ring Protection Switching (ERPS ITU-T G.8032) protocol is also available for ring topology network configurations. The PON Evo 6400 Series OLT system is designed to support extended temperature ranges, making it suitable for installations in Outside Plant (OSP) cabinets in even the harshest environments.



SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions, H x W x D	4RU x 48.5 cm x 24.0 cm (4RU x 19.10 in x 9.45 in)
Line Technology	
	Advanced Encryption Standard (AES); Forward Error Correction (FEC) Up to 128 ONT/Us per PON; T-CONTs: 1024 per PON; Logical Range: 60 km Maximum Differential Distance: 40 km GPON (ITU-T G.984) D/U: 2.5/1.25 Gbps XG-PON (ITU-T G.987) D/U: 10/2.5 Gbps XGS-PON (ITU-T G.9807.1) D/U: 10/10 Gbps NG-PON 2 (ITU-T G.989) D/U: 4 x 10/10 Gbps P2P 1GE (ITU-T G.986) D/U: 1/1 Gbps P2P 10GE (ITU-T G.986) D/U: 10/10 Gbps
Capacity Specifications	
	2x Switch Fabric/processing/uplink modules (Active/Active) 4x Line card slots 2x Power IN, 2x Fan modules
Switch Fabric Specifications	
	2x Cx6400-SFU-300G-100 (Full Duplex, Non-Blocking) Uplink: Up to 4x1/10GE (SFP/SFP+) + 2x100GE (QSFP28)
Line Cards	
	UC-G16 (16x GPON), UC-GX16 (16x GPON/XG(S)-PON), AC-E48-10G (48GbE or 16GbE + 16 10GE)
Layer 2 Services	
Services	1:1, N:1 (TR-15613); VLAN-ID conversion to GEM port-ID; Transparent Add/change S-TAG and C-TAG; Priority bits (p-bits) included in changes
Performance	GPON full wire speed. VLAN Business Ethernet Services/Transparent VLAN Services (VBES/TLS).
IPTV Features	
	IGMPv2/v3 snooping with proxy reporting; IPTV streams forwarding: 1024
Timing/Synchronization	
	SYNC-E, IEEE1588v2/PTP, GNSS (Global Navigation Satellite System).
Protection	
	Load balancing and LACP (IEEE 802.3ad) capabilities on uplink interfaces, Type B protection on xPON interfaces, Ethernet Ring Protection Switching (ERPS ITU-T G.8032), Common element protection (processing, switch fabric, power and Fan modules).
Management and Security	
	Local management by Command Line Interface (CLI) Remote management using SNMP and HTTP protocols Centralized management using CommScope PON Evo™ SDN Management and Control CPE remote management over OMCI G.988 channel with ONU software upgrade capability Anti-MAC and IP spoofing with DAI and IPSG Access Control Lists & MAC limiting; Storm control of unicast, multicast and broadcast traffic In-band and Out-of-band Management: CLI, SNMP, XML RADIUS/TACACS+ login authentication End-to-end Zero-Touch Provisioning (ZTP) capabilities
Environment	
Operating Temperature Range	-40° to +65°C (-40° to 149°F)
Humidity	5%–95% of relative humidity range
Powering	
Power Supply	-48 V DC Input Voltage, Voltage Range -40.5 V DC to 57 V DC
Power Consumption (Watts @-48 V, 25°C)	< 7.4 W (assuming full chassis), Maximum power consumption per PON port
Compliance	
Power	ETSI EN300 132-2 V2.1.1 (2003-01) Recommendation
Earth Protection	ETSI ETS 300 253 Jan 1995 Recommendation
EMC	ETSI 300 386
Environmental	EN 300 019-2-1 (Storage, Class 1,2) EN 300 019 2-2 (Transportation, Class 2,3) Equivalent to ATIS-0600010.01.2008 Class 2, Harsh–Protected Environment
LED Status Indicators	
	Fan-Module Status; ON; PRC; LCK; HLR 1/10/25GE, 40G/100GE Power: P1, P2

ORDERING INFORMATION

Model Name	Part Number	Description
Optical Line Terminal		
PON Evo 6400 Series OLT	OLT-64-4RU	Modular Shelf OLT 4RU/19" 4+2 Slots 3.2Tb/s 64xPON ports
	OLT-64-PWR-U	6400 Series OLT Power Entry Module
	OLT-64-DC-KIT	6400 Series OLT 3m DC Power Kit w/Breaker
	OLT-64-SFU-3-1	6400 Series OLT 300G Switch Fabric 1x100GE Uplink
Optical Line Terminal (Line Cards)		
PON Evo 6400 Series OLT	OLT-G16-GPON	Modular OLT Series 16x GPON Port Line Card
	OLT-GX16-MPM	Modular OLT Series 16x MPM Port Line Card
	OLT-AC-E48-10G	Modular OLT Series 48x 10G AE Port Line Card
SFP/SFP+ Optics		
User Network Interface PON SFP GPON	SFP-GPON-BPLUS-CT	SFP OLT GPON Class B+ Commercial Temp
	SFP-GPON-BPLUS-IT	SFP OLT GPON Class B+ Industrial Temp
	SFP-GPON-CPLUS-CT	SFP OLT GPON Class C+ Commercial Temp
	SFP-GPON-CPLUS-IT	SFP OLT GPON Class C+ Industrial Temp
	SFP-GPON-D-CT	SFP OLT GPON Class D Commercial Temp
	SFP-GPON-D-IT	SFP OLT GPON Class D Industrial Temp
User Network Interface PON SFP+ MPM	SFP-MPM-CPLUS-CT	SFP+ OLT MPM (XGS-PON/GPON) Class C+ Commercial Temp
	SFP-MPM-CPLUS-IT	SFP+ OLT MPM (XGS-PON/GPON) Class C+ Industrial Temp
	SFP-MPM-CPLUS-ET	SFP+ OLT MPM (XGS-PON/GPON) Class C+ Extended Temp
	SFP-MPM-D-ET	SFP+ OLT MPM (XGS-PON/GPON) Class D Extended Industrial Temp
User Network Interface PON SFP Dual Density	SFP-DD-G-CPLUS-IT	SFP+ OLT GPON DD Class C+ Industrial Temp
	SFP-DD-XG-N2-ET	SFP+ OLT XGS-PON DD Class N2 Extended Industrial Temp
Virtual Broadband Gateway (vBNG)		
vBNG Evo Control Plane	AXC-BNG-BASE-SW	vBNG Control Plane Base License
	AXC-BNG-1K-S	Control Plane 1K BNG Subscriber sessions
	AXC-BNG-10K-S	Control Plane 10K BNG Subscriber sessions
	AXC-BNG-100K-S	Control Plane 100K BNG Subscriber sessions
	AXC-BNG-500K-S	Control Plane 500K BNG Subscriber sessions
vBNG Evo User Plane	AXC-BNG-UP-BASE	vBNG User Plane Base License
	AXC-BNG-10G-BW	User Plane Bandwidth 10G
	AXC-BNG-40G-BW	User Plane Bandwidth 40G
vBNG Evo vBNG Bundles	AXC-BNG-10G-20K-PKG	Bundle 20K Control Plane Subscriber Sessions and 10G User Plane Bandwidth
	AXC-BNG-20G-20K-PKG	Bundle 20K Control Plane Subscriber Sessions and 20G User Plane Bandwidth
	AXC-BNG-100G-20K-PKG	Bundle 20K Control Plane Subscriber Sessions and 100G User Plane Bandwidth
	AXC-BNG-100G-64K-PKG	Bundle 64K Control Plane Subscriber Sessions and 100G User Plane Bandwidth
	AXC-BNG-200G-128K-PKG	Bundle 128K Control Plane Subscriber Sessions and 200G User Plane Bandwidth
	AXC-BNG-400G-256K-PKG	Bundle 256K Control Plane Subscriber Sessions and 400G User Plane Bandwidth
vBNG Evo Enhanced Services	AXC-BNG-CGN-10G-BW	Enhanced Carrier Grade NAT Bandwidth 10G
	AXC-BNG-CGN-100G-BW	Enhanced Carrier Grade NAT Bandwidth 100G
	AXC-BNG-SGRE-BASE	Enhanced Soft GRE License

Contact Customer Care for product information and sales:

- United States: 888-944-4357
- International: +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. For additional trademark information see <https://www.commscope.com/trademarks>. All product names, trademarks and registered trademarks are property of their respective owners.

7863700_6400Series_OLT_DS_RevA