CommScope EPON
The End-to-End PON Solution
With the advent of high-capacity optical line terminals and high-speed optical network units, 1GE and 10GE EPON (Ethernet Passive Optical Networks) are now commonplace. While many companies sell EPON components, only a select few possess the experience and resources to create a seamless end-to-end solution. One company has earned the reputation of a trusted advisor to partners around the world and around the block: CommScope®.

The CommScope EPON portfolio not only gives you state-of-the-art, reliable PON components — it also provides connectivity solutions, scalability, expertise and peace of mind that comes from collaboration with a expert who truly understands your business.
CommScope EPON systems provide a scalable and upgradable solution designed to increase revenue, minimize first-installed costs and reduce OPEX — while putting the power of PON to work for you. Developed and supported by the connectivity experts at CommScope, EPON is an end-to-end PON solution that increases revenue, expands bandwidth and helps you deliver the seamless quality of service your subscribers expect.

Higher revenues for you – More services for your customers.

as well as utilities, municipalities and government agencies. Application environments include:

- Commercial In-building
- Security and Building Automation
- Wireless Access Points
The CommScope EPON Portfolio

The CommScope EPON portfolio includes optical line terminals (OLTs), optical network units (ONUs), system management software and installation components. Small and large OLTs plus multiple ONUs give you the tools to optimize system performance while delivering lower overall cost of ownership.

Optical Line Terminals (OLTs)

CommScope EPON OLTs provide high throughput and capacity in a chassis that is easy to deploy and maintain. With both 1GE and 10GE capabilities, CommScope EPON OLTs give you an open migration path to tomorrow’s higher capacity technologies.

- Scalable architecture for capacity expansion
- Redundancy for high availability
- 1GE and 10GE uplink capabilities with link aggregation
- GUI-based provisioning, operation and management

OLT – C9264 is perfect for large-scale deployments, with the ability to service up to 4,096 ONUs. It provides a 960Gbps, 10GE next-generation platform in an 8RU, 19”, rack-mounted chassis. The C9264 OLT supports IEEE 1588v1/v2 as well as Synchronous Ethernet for precise timing and synchronization.

OLT-C9016 can handle up to 1,024 ONUs, making it ideal for smaller deployments. The compact, 19”, 2 RU chassis features 16 x 1GE PON capacity with 2 x 10GE and 4 x 1GE uplink interfaces.
Optical Network Units (ONUs)

The CommScope EPON portfolio offers a variety of ONUs, including single-user, multi-user and small form factor pluggable (SFP) units. The ONUs feature an assortment of Ethernet, Power over Ethernet (PoE), voice ports and Wi-Fi capabilities for the connectivity your subscribers need.

**Single-user ONUs:** CommScope EPON CS-Series ONUs are created for low-cost indoor deployments such as FTTH and FTTDesktop. Each unit uses IEEE 802.3ah EPON technology and features four logical link identifiers (LLID), AES-128 encryption. It also provides dying gasp and remote loopback test support for easy and accurate fault diagnostics.

**Multi-user ONUs:** Our CM-Series ONUs are designed as a compact 1U, 19”, rack-mounted units that feature either 24FE, 24GE or 24GE/PoE ports, along with two uplink ports for optional redundancy.

**SFP ONU:** CommScope EPON SFP ONUs can be used with any SFP-enabled device, including switches and routers, allowing you to customize ONU functionality to your specific needs.

- Single-user, multi-user, SFP
- Optical Ethernet, T1, E1, TDM, and VoIP connectivity
- High redundancy
System management

The CommScope EPON integrates seamlessly into your management architecture. It can be managed from an external command line interface (CLI) and Simple Network Management Protocol (SNMP)-based programs or with its own Graphic Unit Interface (GUI). All management options give you complete control over your EPON network. Manage port, Virtual LAN, multicast and EPON settings. Schedule routine system backups. Download and install upgrades. You can also monitor system performance in real time and manage fault systems such as alarms.

- Provisions and manages all EPON components and performance
- Configures port, VLAN, multicast and EPON settings
- Performs system backups and software upgrades
- Real-time monitoring of fault systems
- SNMP access

Why partner with CommScope for your EPON solution?

Our business is connectivity. Since 1976, CommScope has been a connectivity leader in some of the world’s fastest evolving industries, leveraging a global breadth of expertise to bring all necessary components together and ensure seamless operability. From headend to the ONUs, CommScope can provide all of your PON components, including cabinet enclosures, cabling and connectors. Beyond product support, we see and respond to your challenges from a perspective of experience and innovation. Take confidence in knowing that your CommScope EPON investment will continue to pay dividends — even as future technology evolves.
The CommScope PON solution and your network

### Products
- Single-Port ONUs
- Multi-port ONUs
- ONUs with Ethernet, WiFi, Voice ports

### Services
- Internet access up to 1Gbps
- IP video
- RF video overlay compatible
- Voice
- Wireless (WiFi) Integrated
- Data rates tailored to customer service levels

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### Residential Applications

#### Products
- Scalable OLTs
  - Large – up to 4,096 ONUs per chassis
  - Small – up to 1,028 ONUs per chassis
- EMS (Element Management System)

#### Services
- Carrier-class architecture
- 1GEAPON and 10GEAPON
- Non-blocking NNI capacity
- Full redundancy

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### Commercial Applications

#### Products
- MDU ONUs with up to 24 ports
- 24-Port ONUs with PoE
- FTTDesktop ONUs, 1 and 4-port
- SFP ONUs

#### Services
- SLA-quality and support
- Up to 1Gbps at any Ethernet port
- Multiple layers of security
- Voice, Data, Video
- Wireless backhaul
We’re proud to be part of your network’s story.

CommScope is a trusted resource and partner around the world because we’re invested in you: your people, your networks, your success. It inspires us to build relationships and infrastructure, connect people and technologies across protocols, oceans, and time zones — and share what we learn along the way. We’ll never stop connecting and evolving the business of life at home, at work and on the go.

This is our promise to you.
This is CommScope.

For more information on EPON solutions from CommScope, visit www.commscope.com or email us at EPONsolutions@commscope.com