XE4202

Base Product

10G EPON Remote OLT module for fiber nodes in a Distributed Access Architecture

With the emphasis to move to greater broadband bandwidth in their networks and pushing digital fiber closer to the home or premise, the ARRIS Remote OLT (R-OLT) expands operator choices. Designed to move the OLT functionality closer to the subscriber using existing fiber nodes and VHub platforms, the XE4202 supports 256 households with 10 Gbps symmetrical high-speed data services. With the ARRIS OLT Manager’s support for DPoE™ provisioning, operators are ensured of drop-in operability with existing DOCSIS® OSS back-office systems, allowing seamless deployment of R-OLTs using their existing cable and network support systems.

The XE4202 has been designed to allow operators to optimize the evolution of existing data networks without having to replace components and back-office systems, improving overall network performance and increasing high-speed data throughput to their subscribers.

Digital Optical Networking:

- Extending the distance from headend to Node or VHub up to 80 km with 10 Gigabit Ethernet using digital SFP+ transceiver optics supporting CDWM or DWDM
- Symmetrical 10/10 Gbps or 10/1 Gbps EPON broadband data services with pluggable XFP transceiver optics supporting up to 20 km from the fiber Node/VHub to the Optical Network Unit (ONU)

Investment Protection:

- Deployable in today’s fiber Node NC2000, NC4000, or NH/VH VHub platforms, operators can evolve existing HFC and RfoG installations to EPON R-OLT systems
- The XE4202 can be swapped into newly deployed DAA and fiber deep networks where continued bandwidth demand requires higher data rates, capacities, and potential revenue growth opportunities

Integration with Existing Back-Office Systems:

- DOCSIS Provisioning over EPON (DPoE) ensures drop-in interoperability with existing OSS back-office systems, and seamless provisioning of the R-OLT into cable plant and network support systems using the ARRIS OLT Manager deployed in a virtualized data center
- The ARRIS OLT Manager enables operators to maintain existing DOCSIS provisioning and back-office processes for ONUs via the same OSS systems utilized for provisioning CMTS and cable modems. Each connected ONU appears as a virtual Cable Modem (vCM) which configures and manages the ONU over IP

Converged Network:

- The R-OLT incorporates full traffic management and PON MAC/PHY capabilities with support for IPv4 and IPv6, allowing direct connectivity to the operator’s Converged Interconnect Network
- The ARRIS R-OLT and R-OLT Manager are specifically designed for cable operators with special consideration for evolving network requirements and design to reduce costs, increase bandwidth, and potential services revenue growth.
The Remote OLT:

- Enables deep reach of IEEE 802.3av 10G EPON FTTx commercial and residential services well beyond the typical 20 km centralized PON distribution
- Moves the OLT function out of the headend facility to remote node/VHub platforms, saving floor space, power, and overhead
- Utilizes the ARRIS OLT Manager software for provisioning and management operations, supporting compatibility with DOCSIS back-office OSS systems, and employing standard DPoE V2.0 OAM messaging to configure R-OLTs and ONUs
- Includes two PON ports that each support 128 ONUs, using external splitters
- Supports seamless integration and coexistence with RF video and RFoG networks, supporting shared or independent FTTx
- Is designed for installation in remote ARRIS NC2000/NC4000 Optical Nodes and NH2000/NH4000 Virtual Hub platforms

The OLT Manager provides:

- Provisioning and management based on CableLabs® DPoE v2.0 standard specifications
- Seamless integration of ARRIS 10G EPON R-OLTs into existing DOCSIS back-office infrastructure
- Integration with the existing infrastructure of DOCSIS networking services including: DHCP, TFTP, NTP, SYSLOG, ToD, and SNMP
- Support of IPv4 and IPv6 for R-OLT/vCM management and residential and commercial HSD services traffic
- Support of advanced traffic management including robust QoS mechanisms for transport of diverse triple-play service offerings
- Seamless management of 10G EPON R-OLTs and full lifecycle management from initial deployment, subscriber provisioning, and integration into network monitoring and OSS from a virtualized data center

Product Classification

**Regional Availability**

- Asia
- Australia/New Zealand
- EMEA
- Latin America
- North America

**Product Type**

- Remote OLT