Radisys

DATASHEET

RLT Series GPON & XGSPON OLTs for FTTx

RLT-3200G, RLT-1600G, RLT-1600X

OPEN, FLEXIBLE, SCALABLE

The RLT series of OLTs are based on the industry-standard open architecture supporting GPON and XGS-PON with software based on the VOLTHA/SEBA reference architecture. The architecture brings in data-center driven cost efficiencies as a compact fixed-form factor solution with high port densities. This helps simplify deployments and reduce operating expenses.

From a programmability perspective, these OLTs have open APIs that utilize standard interfaces for all management functions, easing the integration into an SDN-controlled environment. In addition to being open, programmable and scalable, all embedded software functions in the OLT, including ONT management, PON provisioning and IGMP processing are virtualized. Radisys enables flexibility to deploy these virtualized functions either in distributed fashion running within the CPU inside OLT, or as a centralized function that can be hosted on an external server or public/private cloud. The flexibility enables operators to choose their preferred deployment model, allowing a traditional deployment model as well as an OpEx friendly cloud deployment model.

The Radisys RLTs offer all of the carrier-class features such as ONT management, clocking, VLAN tag manipulation, QoS, reliability of a traditional chassis-based OLT system with much more flexibility, scalability and an open architecture that cannot be matched by a closed, vendor-specific chassis system.

High Performance with Flexibility

The OLTs offer non-blocking 10, 25, 40 and 100Gbps uplink interfaces to support next-generation residential, business and backhaul services. Ethernet ports can be used as NNI and for active Ethernet services.

There are three variants in offer to enable operators to choose cost vs. flexibility per their market needs.

RLT-3200G: This OLT variant offers 32 SFP based GPON interfaces in 2RU height. This comes with 160Gbps switching capacity and NNIs are 2 QSFP+ ports (40GE / 4x10GE) and 8 SFP+ ports (1GE/10GE)

RLT-1600G: This OLT variant offers 16 SFP based GPON interfaces in 1RU height. This comes with 160Gbps switching capacity and NNIs are 2 QSFP+ ports (40GE / 4x10GE) and 2 SFP+ ports (1GE/10GE)

RLT-1600X: This OLT variant offers 16 SFP+ based Any-PON interfaces in 1RU height. AnyPON interface means that each of these ports can support a GPON SFP as well as an XGS-PON SFP+. This comes with 300Gbps switching capacity and NNIs are 2 QSFP28 ports (100GE / 40GE) and 4 SFP28 ports (10GE/25GE)

FEATURES

- Flexibility of enabling GPON and XGSPON on the same platform
- 1GE, 10GE, 25GE and 100GE NNI interfaces with active Ethernet support
- Supports high-capacity, open, programmable networks
- Supports residential, cloud and enterprise services
- Front access on all ports
- Full support for IEEE-1588 OC, TC, and BC
- Deep-buffer Service Provider class switching ASICs

Specifications

FEATURE	DESCRIPTION
Front Panel PON Ports	RLT-3200G: 32x SFP supporting GPON RLT-1600G: 16x SFP supporting GPON RLT-1600X: 16x SFP+ supporting AnyPON (GPON or XGS-PON)
Front Panel Network Ports	RLT-3200G: 2 QSFP+ ports (40GE / 4x10GE) and 8 SFP+ ports (1GE/10GE) RLT-1600G: 2 QSFP+ ports (40GE / 4x10GE) and 2 SFP+ ports (1GE/10GE) RLT-1600X: 2 QSFP28 ports (100GE / 40GE) and 4 SFP28 ports (10GE/25GE)
Front Panel Auxiliary Ports	1Gb OOB Management with Sync-E support 1Gb GPS/IEEE-1588 with Sync-E support 1Gb Alarm Gateway
Protection Features	Link Aggregation (LAG) G.8032 ERPS Ring Support Type-B Protection for PON
Environment	Environmentally Hardened Chassis, Operating temperature: -40°C to 65°C
Physical	Dimensions (excluding mounting brackets): 19-inch rack-mountable enclosure RLT-3200G (2RU): 442mm W x 280mm D x 86mm H RLT-1600G (1RU): 442mm W x 280mm D x 44mm H RLT-1600X (1RU): 442mm W x 280mm D x 44mm H Hot-swappable fan tray with single fan failure supported at the full temperature range Input power: Redundant isolated -48VDC power feeds, OVP and reverse-voltage protection, 10ms hold-up
Capacity	300Gb full-duplex switching capacity for RLT-1600X 160Gb full-duplex switching capacity for RLT-3200G and RLT-1600G Supports up to 128 ONTs per GPON and 256 ONTs per XGS-PON interface
PON Technology	GPON per ITU-T G.984 XGS-PON per ITU-T G.9807 Dynamic Bandwidth Allocation (DBA) Type B Redundancy
Subscriber Service Delivery	Triple-play: voice, video and data IGMP snooping and proxy with fast channel change DHCP relay
Manageability	Remote Management through SSH Local Ethernet and USB interfaces for management OMCI to ONTs CLI In-field upgrade of all SW, FW and programmable logic
Optics	Class B+, C+, C++ for GPON, compliant as specified in ITU-T G984.2 Class N1, N2, E1, E2 compliant as specified in ITU-T G9807.1
Regulatory Standards	EMC: CE marking and FCC Part 15 Class A Safety: UL/CSA/IEC/EN 62368-1, designed to meet GR-1089 Core, GR-63 Core Environmental: RoHS 6 of 6

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