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Data Sheet

General Availability

ONT-30

High Performance Enterprise and Residential NG-PON ONT

- Smooth migration from today's GPON deployments to next generation 10G Symmetric and Asymmetric PON solutions on same fiber protecting existing infrastructure investments
- Five 10/100/1000 Mbps Ethernet ports supporting 802.3af/at/bt and one 10G Optical interface
- Flexible architecture supports dual-band concurrent Wi-Fi with 802.11ac Option
- Optimized for IPTV video triple-play deployments

ONT-30 is a versatile ONT product series available in multiple flavors, supporting XG PON and XGS-PON. It is part of RAD's full GPON solution that includes both OLT (Optical Line Terminal) and ONT (Optical Network Terminal) platforms.

ONT-30 comples to ITU-T G.987.3, G.9807.1 and TR69 set of standards.

MARKET SEGMENTS AND APPLICATIONS

RAD offers a series of advanced GPON ONT elements designed for next-generation Optical Access networks deployed in FTTH (Fiber-to-the-Home) and FTTB (Fiber-to-the-Building) formats. The product line addresses the rapidly growing service provider needs for flexible, high-capacity fixed-line broadband solutions to support emerging video applications (e.g., IPTV, Mobile backhaul, MTU, VOD) in industrial, enterprise, residential deployments, aggregation of backhaul traffic from LTE cell sites, enterprise VPN Services and SD-WAN networks based on NFV paradigm.

SERVICES

Using standard OMCI and TR69 protocols, ONT-20 can be configured to provision IPTV, VOD, IOT, Internet, VoIP, WiFi services and more.

ETHERNET

ONT-30 has 5 Ethernet interfaces with PoE to cater for such applications as IPTV, Internet, CCTV etc and one 10GE optical Ethernet Interface to support mobile backhaul, enterprise applications and more.

POE

The system has an option for POE (802.AF/AT) for powering devices connected to ONT-30 over Ethernet, thus reducing the requirement of separate power source for end equipment.

POTS

ONT-30 has two POTS interfaces for voice services to public switched telephone network (PSTN).

WIFI

ONT-30 features Dual concurrent WiFi, in compliance with IEEE 802.11 a/b/g/n/ac standards to support enhanced WiFi coverage for home applications.

POWER

Powering options include both local AC and remote DC. For local AC power, power adaptors are used to transform AC power to 56V DC power. A centrally located rectifier (48 VDC) can be also be used.

RAD

Your Network's Edge®

ONT-30

High Performance Enterprise and Residential NG-PON ONT

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Specifications

GIGABIT ETHERNET INTERFACE

Number of Ports	5
Compliance	Meets 802.3 specifications
Type	10/100/1000Mbps
Connector	RJ-45
PoE Ports	PoE, PoE+, and PoE++, complying with IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt through Electrical Ethernet ports
Ethernet Packets	up to 2 kB (Jumbo)
Modes	10/100/1000Mbps auto-negotiation
	MDI/MDIX auto detection

10 GIGABIT OPTICAL ETHERNET INTERFACE

Number of Ports	1
Type	SFP+
Ethernet packets	up to 2 kB (Jumbo)

POTS INTERFACE

Number of Ports	2
Type	FXS
Connector	RJ-11
Signaling	SIP (RFC 3261)
Locale Selection	Based on country profile
Codecs	G.711Alaw, G.711Ulaw, G.729
	Media and signal are separated
Fax	Transparent FAX, T.38
DTMF	Inband, RFC2833, SIP Info, V.18 support
Voice Activity Detection	Supported SIP
Transport	UDP & TCP

USB3.0 INTERFACE

Number of Ports	2
Type	A
Connector	USB
Compatibility	USB1.1, USB 2.0 Backward Support
Features	Configurable to be host or device
	Over current protection

PON INTERFACE

Compliance	ITU-T G.9807.1 (physical layer) and G.987 (.2/.3/.4) standards
Interfaces	SFP+ type laser with SC/APC connector
	XG-PON: Receiver sensitivity: -28 dBm; Overload optical power: -9 dBm
	XGS-PON: Receiver sensitivity: -28 dBm; Overload optical power: -9 dBm
Data Rates	Downstream 9.953Mbps
	Upstream: 2.488Mbps
Power Saving	As per G.9807.1 and G.987.3
Data Rates	Upstream XGS-PON: 9.953Mbps
GEM Ports Protection	Up to 256 IDs
Error Correction	Upstream and Downstream FEC
Monitoring	HW dying gasp

WIRELESS INTERFACE

Compliance	802.11 a/b/g/N/AC with channel bandwidth: 20/40/80MHz
Frequency of Operation	2.4GHz/5GHz
SSID per Radio	4
Features	AP isolation
	Mac restrict mode
	Mac filter-based probe response
	WMM
	Beam forming
	Band steering
Max Clients	32 per radio
No of TX/RX Chains	2 for 2.4GHz 2 for 5GHz
Beacon Interval	Configurable
Security	Open, 802.1x, WPA, WPA-PSK, WPA2, WPA2-PSK

ONT-30

High Performance Enterprise and Residential NG-PON ONT

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TRAFFIC MANAGEMENT

Features	Bi-directional AES-128 encryption
	Forward Error Correction (FEC)

GENERAL

Environment

Operating Temperature	-40°C to +65°C (-40°F to 149°F)
Storage Temperature	-40°C to +85°C (-40°F to 185°F)
Altitude	Up to 4000m
Humidity	5 to 95%, non-condensing
Cooling	Conduction-based

Power

Power Supply	12 VDC ,2A +/-5%, round barrel-type connector for power input

Physical

Form Factor	Table top and wall mount enclosure

Ordering

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