

INT-1010EDS-ONU

Features and Benefits

Intercept's 10G EPON ONU delivers triple-play services to the subscriber in Fiber-to-the-Home or Fiber-to-the-Premises application. The 10G-EPON ONU is designed for SDU (Single Dwelling Unit) applications and incorporates DPOE interoperability for seamless provisioning when co-deployed in DOCSIS networks. Equipped with IEEE 802.3 av compliant 10 G Downstream and 10G Upstream 10G-EPON interface, the INT-1010EDS-ONU supports the full Triple Play of services including voice, video, and high speed internet access service.

Compliant with standard OAM and DPOE definitions, INT-1010EDS-ONU supports the full range management functions including supervision, monitoring and maintenance.



Data

The INT-1010EDS-ONU is delivered with one 10G Base-T, and three 10/100/1000 Base-T Ethernet data interfaces, supporting:

- *Auto-negotiation and MDI/MDIX auto-sensing*
- *Built-in layer-2 switch*
- *Advanced data features such as VLAN tag manipulation, classification, and filtering*

Voice

To enable VoIP access, the INT-1010EDS-ONU supports interfacing external IAD box or Home Router with voice capability through the Ethernet Interface.

Video

The INT-1010EDS-ONU supports IPTV delivered in the form of data (by multicast or unicast).

In the case where multicast technology is used for delivering video content through a data channel, the ONU supports the dedicated downstream multicast LLID. So the video content is received and processed by all the ONUs through the unified channel which greatly improves the bandwidth efficiency.

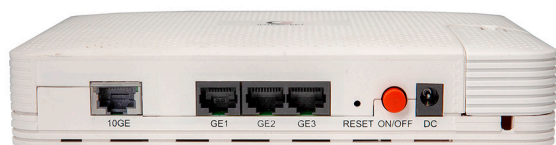
In addition, the ONU supports IGMP snooping function to be applied for further optimization. When IGMP snooping is enabled, the ONU monitors the member joining and leaving activities at the Ethernet service port, and then selectively delivers the multicast streams.



INTERCEPT

INT-1010EDS-ONU

Interfaces



Product	10G Base-T	10/100/1000 Base-T
INT-1010EDS-ONU	1	3

Specifications

Dimensions
190 mm x149 mm x 38 mm (H x W x D)
Power Supply
+12 V (feed via external AC/DC adapter)
2-PIN power adaptor input
Dying Gasp support
Power switch
Power Consumption: less than 10 W
Working Environment
Temperature: -10 °C ~ 45 °C
Humidity: 10%~ 95% relative humidity
Safety & EMI
CE certificate
Installation
Desktop mounting
PON Interface
Compliant with IEEE 802.3av and SIEPON IEEE 1904.1 standards
SFP+ cage for optical uplink
10 Gbps Burst Mode Upstream Transmitter
Compliant with IEEE 802.3av PR-30 PHY 15 to 29 dB Channel Loss PR-10, PR-20 also supported
Wavelengths: US 1260 nm to 1280 nm DS 1575 nm to 1580 nm
Back compatible with 10G-EPON Asymmetric (10 G Downstream and 1 G Upstream)
PON Features
Multiple LLIDs per device
Flexible mapping between traffic priority and LLID

Multicast LLID and IGMP/MLD support
Link Security AES-128 both directions as defined by DPOE Triple Churning defined by CTC MACSec
FEC (Forward Error Correction) in both directions
DBA reporting – 1-8 Queue, 1-2 Qsets
802.1p mapper service profile on U/S
Ethernet Interface
10/100/1000 Base-T interface with RJ-45 connectorate
10G Base-T interface with RJ-45 connectors
Ethernet port auto negotiation or manual configuration
MDI/MDIX automatically sense
Hardware priority queues on the downstream direction in support of CoS
802.1D bridging
VLAN tagging/detagging per Ethernet port
Back compatible with 10G-EPON Asymmetric (10G Downstream and 1G Upstream)
Multiple LLIDs per device
VLAN stacking (Q-in-Q) and VLAN Translation
IP ToS/DSCP to 802.1p mapping
Class of Service based on UNI, VLAN-ID, 802.1p bit, and combination
Marking/remarking of 802.1p
IGMP v2/v3 snooping and IGMP snooping with proxy report
Broadcast/Multicast rate limiting
OAM
Standard compliant OAM (the embedded operations channel) interface as defined by IEEE 802.3av, IEEE 1904.1, DPoEv2.0 and CTC V3.0
Remote software image download over OAM, as well as activation and rebooting
Hold two software sets with software image integrity checking and automatic rollback

Specifications subject to change without notice