



INNBOX G11

GPON SFP ONT

Innbox G11 is a complete GPON ONT built into a standard SFP (Small Form-factor Pluggable) enclosure, bringing carrier class high-end networking solution for advanced triple play services to service providers demanding high-speed network connections. Complying with the latest ITU-T G.984 GPON standard, the newly introduced Innbox GPON G11 ONT SFP module is designed for bridging applications, that are now easier to deploy, with just inserting this MSA-compliant SFP into a suitable host device. Like the Innbox desktop G21 ONT, the G11 SFP ONT delivers a full range of advanced IP voice, data and video services over an all-optical broadband access network.

The GPON ONT SFP Innbox G11 is designed to deliver full range of services: internet data, Voice over IP (VoIP) and IP video including bandwidth consuming HDTV. QoS and multicast video support are also included within this smallest possible form-factor. Innbox G11 SFP ONT is ideal for converting the network side of a device from a legacy Ethernet connection to a high-speed GPON link. Ethernet switches, routers, set-top boxes and Iskratel / Innbox access products are just some of the devices that may host the G11 SFP ONT in their on-board SFP port. The end side of the Innbox G11 SFP ONT presents a full-duplex Gb link with wire-speed throughput. No external power supply is required for the Innbox G11 SFP ONT. Dying-Gasp support alerts the network operator of loss of power to the host device, or removal of the Innbox G11 SFP ONT, helpful for problem identification in remote areas. The G11 SFP ONT is hot pluggable and easy to install, its small footprint making it ideal for use where space or physical access to AC power is difficult. Compliant with standard OMCI definitions, the Innbox G11 ONT is manageable at remote sites and supports the full range FCAPS functions including supervision, monitoring and maintenance.

Key Features and Benefits >

GPON ONT in a small and standardized SFP Enclosure

MSA-Compliant SFP Footprint

ITU G.984 GPON compliant

Powerful engine for offering QoS on 3Play services

Multicast video

Lowest power consumption possible

TECHNICAL SPECIFICATIONS

Note: some features are hardware dependant;
some feature may not be included in dedicated software release.

WAN Specifications

- Full ITU-T G.984 compliance
- ITU-T G.985 compliance with WBF for interoperability with NG wavelengths
- SC/APC connector
- Tx (1.25Gbps upstream data rate)
 - 1310nm (Launch Power: 0,5 to +5 dBm)
- Rx (2.5Gbps downstream data rate)
 - 1490nm (Input power overload: -8 dBm, Sensitivity: -28dBm)

GPON

- Fully ITU-T G.984 compliant framing
- Dying Gasp support
- 8 T-CONTs per device
- 32 GEM Ports per device
- Flexible mapping between GEM ports and T-CONTs
- Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction)
- 802.1p mapper service profile on U/S
- Support for Multicast GEM Port

SFP Interface

- 1 x1000 Base-X Ethernet (Internal port - SGMIII)
- Meets IEEE 802.3 specifications

Bridging

- Bridging and switching (802.1d / 802.1q)
- Four traffic classes with 802.1p
- 802.3n flow control
- Up to 128 MAC address entries
- VLAN tagging / untagging
- VLAN stacking (Q-in-Q)
- MAC limiting
- 2,000 bytes max Ethernet frame size
- Transparent pass-through of IPv6 frames

IP TV

- IGMP multicast
- IGMP snooping v1/v2/v3
- Up to 256 Multicast Groups

Configuration & Network Management

- CLI
- OMCI
- Image updates via OMCI, TFTP

Bandwith/Distance

- ITU-T G.985 compliance with WBF for interoperability with NG wavelengths
- Compliant with ITU-T G.984.5, Class B+
 - APD receiver and DFB transmitter
 - 0.5~+5dBm launch power, -28 dBm sensitivity and -8dBm overload

Physical dimensions

- MSA-compliant SFP enclosure
- 75mm x 14mm x 12mm, weight 31g (with dust plug)
- Length beyond SFP cage: 27mm

Operating Requirements

- Ambient Temperature: -40°C ~ 70°C
- Relative humidity: 5% ~ 95% (non condensing)
- Storage Temperature: -25°C ~ +55°C, Humidity: 10% ~ 95% (non condensing), compliant with ETSI 300 019-1 -1, Class 1.2

Certification

- CE, CB, RoHS compliant

Ordering info

Model	Local Interfaces
Innbox G11	Inndor GPON SFP ONT, 1xGE (SGMII)