



Genexis FiberBox

XGS2000B-Series (XGS-PON)

Stand-alone network demarcation



The landscape of the FTTH market is evolving. XGS-PON is becoming the standard, and more areas are turning into brownfield. The Genexis FiberBox provides the perfect solution for this scenario. A small and elegant device that easily connects via a patch cable.

To further enhance the plug-and-play for brownfield, the FiberBox includes TrueTalk™. TrueTalk enables seamless integration with

all OLTs in your network. The FiberBox can therewith detect and connect to any OLT via a single generic firmware version.

With the FiberBox, Genexis aims to adapt to the connectivity landscape of today and tomorrow. This to cater to the evolving requirements of the market, ensuring reliable and efficient network connectivity for all.

Key features

- Stand-alone network demarcation
- Wall-mount or desktop installation
- XGS-PON WAN-port with self closing dust protection
- 10GE LAN-port and optional CATV with LED indicators
- TrueTalk™ PON autosensing
- Made in Vietnam

Sustainability features

- Power consumption compliant to EU-CoC-BBE
- Housing made of 80% recycled plastics
- Halogen free PCB
- Minimized size to reduce materials
- Surge protection against lightning strikes

TrueTalk™ PON autosensing

TrueTalk is the ultimate choice for seamless ONT - OLT connectivity. As an open and independent vendor, Genexis empowers your network with reliability and freedom. No more software complexities with our unified version for all the main OLTs, simplifying installation and future network choices. Thanks to TrueTalk, the FiberBox automatically detects which OLT it is connected to and adapts accordingly.

With over 100 network deployments worldwide, our proven interop ensures uninterrupted communication, making Genexis a trusted partner in the industry.

Gain peace of mind knowing that our in-house PON interop labs, strategically located in Europe, rigorously test and validate PON interoperability. With TrueTalk, your choice in ONT will not limit your future OLT choices.



Product features and specifications

Genexis FiberBox XGS2000B-Series (XGS-PON)

Environment

Dimensions (H x W x D)	114x114x30 mm
Power supply voltage	12 Vdc ± 5%
Operating temperature	0 - 40 °C
Operating humidity (non-condensing)	5% ~ 95%
Storage temperature	-25 - 55 °C
Storage humidity (non-condensing)	10% ~ 100%
Flame retardants	Halogen free
Weight	
· FiberBox XGS2110B	190 g
· FiberBox XGS2120B	222 g

Power consumption

FiberBox XGS2110B	3.8 W Ready Mode 3.8 W On Mode
FiberBox XGS2120B	5.0 W Ready Mode 5.0 W On Mode

LAN interface(s)

10GE: Compliant with 100/1000/2.5GE/5GE/10GE BASE-T
Led indicators for speed and activity

User interfaces

- 10GE LAN interface
- 1 x Power connector
- 1 x Power button
- 1 x Reset button
- 1x CATV Output coaxial F-female*

WAN interface

- 1x XGS-PON interface
- Compliant with ITU-T G.9807.1 Annex B
- Compliant with ITU-T G.988
- Compliant with BBF TR-156 issue 4
- Compliant with BBF TR-247

SC/APC connector
N1 optics
· TX (upstream) power +4 ... +9 dBm
· RX (downstream) power -9 ... -28 dBm
· TX wavelength 1260 ... 1280 nm
· RX wavelength 1575 ... 1580 nm
TRx allows co-existence with GPON, 25GS-PON and CATV
Interoperable with the main OLT brands in triple-play configurations
Support up to 256 XGEM ports (XGS-PON Encapsulation Method)
32 T-CONT (Transmission Containers)
Support a maximum total of 16 VLANs
Dying gasp

CATV*

Wavelength (typical)	1550 nm
Optical return loss	min 40 dB
RF passband	45-900 MHz
RF output impedance	75 Ω
F-Connector length	8,5 mm
AGC optical input power	-9 ... 0 dBm
RF output level (AGC on)	80 ± 2.5 dBμV
RF flatness	max 2 dB
Output return loss	max -10 dB
Slope / tilt	1 ... 4 dB
CNR min	47 dB@-8 dBm
CSO / CTB	max -57 dBc
Spurious to carrier	max -57 dBc
MER QAM-64	> 35
MER QAM-256	> 37
BER	max 1.0E-9

Remote management via OMCI (OLT dependent)

Interoperable OLTs - TrueTalk™

Genexis has been an independent PON OLT vendor since 2013. All Genexis ONTs are interoperable and have been field deployed with main OLT brands active in the European and North American markets. Genexis will provide its full support to enable a successful interop. Please ask your sales representative for more information.

Emissions and safety regulations

- CE, FCC and ISED approved
Safety:
- IEC EN 62368-1
 - BS EN 62368-1
- Laser safety:
- IEC 60825-1: Class 1 laser
- Emissions & Immunity:
- EN 55032/CISPR 32, Class B
 - EN 55035
 - FCC CFR47 Part15, Subpart B
 - ICES-003
- RoHS/WEEE marking:
- Compliant with 2011/65/EU
- Surge protection
- Compliant with ITU-T K.21 basic level

Status LEDs

- Power/Alarm
- Fiber uplink status
- LAN
- CATV status*

* Applicable to selected models only

FiberBox XGS2000B-Series (XGS-PON) product models

Model	Type	10GE LAN	CATV
FiberBox XGS2110B	Layer-2 XGS-PON ONT	1x	-
FiberBox XGS2120B	Layer-2 XGS-PON ONT	1x	Yes

