Genexis XGS-PON ONT

XGS2110-Series

Compact and high-speed network demarcation

InterOS
INDEPENDENT INTEROP

Where 1G ONTs are starting to hit bandwidth limitations in some cases, XGS-PON provides a cost-effective and future-proof solution. The XGS-PON ONT from Genexis addresses this increasing market demand.

The Genexis XGS-PON Media Converter provides high-speed 10G fiber optic bandwidth. The upgrade costs are minimal, by making use of existing installed FTUs. The product's housing is made from at least 98% recycled plastics.

Key features

- Compact and high-speed XGS-PON network demarcation
- Cost-effective solution for single-dwelling deployment scenarios
- Interoperable with the major OLT brands in triple-play configurations
- Supports the coexistence with CATV, GPON and NG-PON2 standards
- Fully compatible with TK01 FTUs
- Housing made of at least 98% recycled plastics

Sustainable high-speed fiber connection

The Genexis XGS-PON ONT is the perfect fit to support a mass rollout on an XGS-PON network. By making use of one of the latest XGS-PON chipset generations, the GMC-TK01-XGS2110 enables a future-proof and cost-effective solution.

It offers a click-on function onto the existing TK01 FTUs already deployed in the field. This enables a fast installation, and therewith minimizes the time an installer needs to be at the customer premises.

Genexis takes care about the environment. To also meet the increasing market expectations about a circular economy, the housing of this product is made from at least 98% recycled plastics. In addition, focus is also put on minimizing the power consumption in an effort to reduce the environmental impact once the product is being used in the field in a 24/7/365 manner.

Product features and specifications

Environment

Dimension (H x W x D):	176 x 112 x 50 mm
Weight:	250 g
Power supply voltage:	12 Vdc, 1A
Power consumption:	Idle 7,7W; max 8,3W
Operating temperature:	-5 ... 45 °C
Operating humidity	5% ~ 95%
(non-condensing)	
Storage temperature:	-25 ... 55 °C
Storage humidity:	10% ... 100%
(non-condensing)	
Flame retardants:	Halogen free

WAN interface

1x XGS-PON interface
- Compliant with G9807.1 Annex B
- 10 GPON Encapsulation Method (XGEM) framing

Single mode fiber (ITU-T G.652.A2)

SC/(A)PC connector

Full duplex transmission
- TX   1260 ... 1280 nm
- RX   1575 ... 1580 nm

Class 1 laser product
- Transmit power   +4 ... +9 dBm
- Receive power   -28 ... -9 dBm

Flexible mapping between XGEM ports and T-CONT

Forward error correction (FEC)

AES-128 channel encryption and decryption

TRx allows c0-existence with GPON, NG-PON2 and CATV

Interoperable with the major OLT brands in triple-play configurations

Dying gasp

LAN interface

Compliant with IEEE 802.3
(100M/1G/2.5G/5G/10G BASE-T)

1x RJ-45 Connector

Wire speed performance

LED indicators for speed and activity

User interface

1x 10GE LAN interface

1x Power connector

1x Power on/off button

1x Reset button

Interoperability

Genexis has been an independent PON ONT vendor since 2013. All Genexis ONTs are interoperable and have been field deployed with major OLT brands active in the European and North American markets. Genexis provides its full support to enable a successful interop

Emissions and safety regulations

CE approved

Safety
- IEC EN 62368-1

Laser safety
- IEC EN 60825-1: Class 1 laser

Emmissions & immunity
- EN 55032
- EN 55035
- EN 300386

RoHS/WEEE marking:
- Directive 2011/65/EU
  - Delegated Directive 2015/863
- Directive 2012/19/EU

Ecodesign
- Directive 2009/125/EC

Surge protection:
- Compliant with ITU-T K.21 basic level

Status LEDs

Power

Connection

Alarm

Ethernet (2x on LAN/RJ-45)

GMC-TK01-XGS2110

Genexis Media Converter XGS2110-Series product models

Model	WAN connecter type	FTU support
GMC-TK01-XGS2110	SC/APC (green)	TK01

The Genexis Media Converter XGS2110-Series supports the coexistence with CATV, GPON, XG-PON, and NGPON2 standards.

Note: Not every listed feature may be included in the shipping product. We reserve the right to make changes of technical specifications, housing or design without prior notice.