





# Genexis FiberTwist

XGS2000-Series (XGS-PON)

Compact and high-speed network demarcation



Where GPON and Point-to-Point (PtP) are starting to hit bandwidth limitations, XGS-PON provides a solution. The well-known FiberTwist now offers an easy Do It Yourself (DIY) upgrade path from GPON and PtP to XGS-PON: increasing the enduser's bandwidth with a single twist.

### Key features

- · Compact and high-speed XGS-PON network demarcation
- A flexible solution matching both single-dwelling and multidwelling deployment scenarios
- TrueTalk<sup>™</sup> PON autosensing
- Patented FiberTwist twist-on interface on FTU or Bracket, enabling 100% fool-proof, DIY, end-user installation
- · Optional integrated CATV receiver or FXS-port
- 10GE or 2.5GE LAN, and up to 3x GE LAN ports to connect external devices, such as a Residential Gateway

#### Sustainability features

- · Power consumption compliant to EU-CoC-BBE
- · Housing made of 90% recycled plastics
- · Halogen free PCB
- · Minimized size to reduce materials
- · Surge protection against lightning strikes

With the FiberTwist product range, Genexis introduces a unique broadband connectivity solution that redefines size, ease of installation and flexibility for the distribution of fiber bandwidth throughout the entire home.

# A perfect fit for every deployment scenario

The FiberTwist product family has been developed in such a way that it can be integrated into various deployment models, including single-dwelling and multi-dwelling scenarios.

Using products from the FiberTwist FTU family, the demarcation point can be extended to any desired location in the home, enabling easy access and installation of services.

Its small size makes the FiberTwist a perfect fit in any environment, be it a living room, metering cabinet or basement.

# Product features and specifications

# Genexis FiberTwist XGS2000-Series (XGS-PON)

#### **Environment**

Dimensions ( $H \times W \times D$ ) FiberTwist XGS21xx / XGS2310(B) 4.33x4.33x1.81 in · FiberTwist XGS24xx 7.09x7.09x2.24 in Weight · FiberTwist XGS2110-2.5G 0.35 lbs · FiberTwist XGS2120-2.5G 0.46 lbs FiberTwist XGS2110 0.41 lbs · FiberTwist XGS2120 0.54 lbs · FiberTwist XGS2310B 0.44 lbs · FiberTwist XGS2410 0.78 lbs · FiberTwist XGS2420 0.91 lbs Power supply voltage 12 Vdc ± 5% Operating temperature 32 - 104 °F Operating humidity (non-condesending) 5% ~ 95% Storage temperature -13 - 131 °F Storage humidity (non-condesending) 10% ~ 100% Flame retardants Halogen free

# LAN interface(s)

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

### User interfaces

- 1 x Unlock button
- 1 x LED dimming button

10GE / 2.5GE / GE LAN interfaces\*

- 1 x Power connector
- 1 x Power button
- 1 x Reset button
- 1x CATV Output coaxial F-female\*

## Power consumption (EU-CoC-BBE)

FiberTwist XGS2110-2.5G	3.2 W Idle Mode
	3.2 W On Mode
FiberTwist XGS2120-2.5G	5.1 W Idle Mode
	5.5 W On Mode
FiberTwist XGS2110	4.8 W Idle mode
	5.3 W On Mode
FiberTwist XGS2310B	4.0 W Idle Mode
	6.1 W On Mode
FiberTwist XGS2410	3.8 W Idle Mode
	6.2 W On Mode
FiberTwist XGS2420	5.8 W Idle Mode
	7.7 W On Mode

FiberTwist XGS2000-Series (XGS-PON) has two different housings, based on specs.





#### 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

N<sub>1</sub> optics

TX (upstream) power
 RX (downstream) power
 TX wavelength
 RX wavelength
 1260 ... 1280 nm
 RX wavelength

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

Interoperable with the major OLT brands in triple-play configurations

Support up to 256 XGEM ports (XGS-PON Encapsulation Method) 32 T-CONT (Transmission Containers)

Dying gasp

#### CATV\*

Wavelength (typical) 1550 nm Optical return loss min 45 dB RF passband 45-900 MHz RF output impedance 75  $\Omega$ F-Connector length 11 mm AGC optical input power -9 ... o dBm RF output level (AGC on)  $80 \text{ or } 86 \pm 2.5 \text{ dB}\mu\text{V}$ according to CENELEC-42 4% OMI / ch 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 > 34 MER QAM-256 > 36

# Interoperable OLTs - $TrueTalk^{TM}$

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 will provide its full support to enable a successful interop.

Please ask your sales representative for more information.

### Emissions and safety regulations

CE, UKCA, FCC and ISED approved

Safety:

· IEC EN 62368-1

Laser safety:

• IEC 60825-1: Class 1 laser Emissions & Immunity:

- · EN 55032/CISPR 32:2008, Class B
- · EN 55024 / EN 55035

RoHS/WEEE marking:

· Compliant with 2011/65/EU

Surge protection

· Compliant with ITU-T K.21 basic level

#### Status LEDs

Power U
Fiber uplink status 

CATV Status\*

U
CATV Status\*

# FiberTwist XGS2000-Series (XGS-PON) product models

Remote management via OMCI\*\*

Model	Туре	10GE LAN	2.5 GE LAN	GE LAN	CATV
FiberTwist XGS2110-2.5G	Layer-2 XGS-PON ONT	-	1x	-	-
FiberTwist XGS2120-2.5G	Layer-2 XGS-PON ONT	-	1x	-	Yes
FiberTwist XGS2110	Layer-2 XGS-PON ONT	1x	-	-	-
FiberTwist XGS2120	Layer-2 XGS-PON ONT	1x	-	-	Yes (80 ± 2.5 dBμV)
FiberTwist XGS2130	Layer-2 XGS-PON ONT	1x	-	-	Yes (86 ± 2.5 dBµV)
FiberTwist XGS2310B	Layer-2 XGS-PON ONT	1x	-	2x	-
FiberTwist XGS2410	Layer-2 XGS-PON ONT	1x	-	3x	-
FiberTwist XGS2420	Layer-2 XGS-PON ONT	1x	-	3x	Yes (80 ± 2.5 dBμV)

<sup>\*</sup> Applicable to selected models only

<sup>\*\*</sup> OMCI implementation by the OLT is required





## Interested?

Contact your local sales representative Or visit us at www. genexis-broadband.com