



Genexis FiberTwist

G2000-Series (GPON)

Compact network demarcation



Providing Gigabit fiber connectivity to any desired location in the home is one of today's major challenges.

With the endless variety of different deployment scenarios and end-user requirements, this calls for a flexible and scalable in-home connectivity solution.

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.

Key features

- Compact, fully managed GPON network demarcation
- A flexible solution matching both single-dwelling and multi-dwelling deployment scenarios
- Patented FiberTwist twist-on interface on FTU or Bracket, enabling 100% fool-proof, DIY, end-user installation
- Optional integrated CATV receiver
- Up to 4x gigabit LAN port(s) to connect external devices, such as a Residential Gateway
- Interoperable with the major OLT brands in triple-play configurations

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 (110 x 110 x 46 mm) makes the FiberTwist a perfect fit in any environment, be it a living room, metering cabinet or basement.



Product features and specifications

Genesis FiberTwist G2000-Series (GPON)

General specifications

Dimensions (H x W x D)	110x110x46 mm
Weight (G2110)	132 g
Weight (G2120)	350 g
Weight (G2410)	176 g
Weight (G2420)	225 g
Power supply voltage	12 Vdc ± 5%
Power consumption	max. 2 W
with CATV *	max.5.2 W
Operating temperature	0 - 40 °C
Storage temperature	0 - 70 °C

WAN interface

1x GPON interface

- Compliant with ITU-T G.984.1/2/3/5
- Compliant with ITU-T G.988

SC/APC connector

Class B+ optics

- TX (upstream) power +0.5 ... +5 dBm
- RX (downstream) power -8 ... -28 dBm
- TX wavelength 1310 nm
- RX wavelength 1490 nm

Interoperable with the major OLT brands in triple-play configurations

128 GEM ports (GPON Encapsulation Method)

32 T-CONT (Transmission Containers)

LAN interface(s)

Compliant with IEEE 802.3 Clause 40 (1000/100/10BASE-T)

LED indicators for link and activity

CATV*

Optical wavelength	1550 - 1560 nm
Optical input range G2420	-8 ... 0 dBm
Optical input range others	-9 ... 0 dBm
RF output F connector	75 Ω
RF frequency range	47 - 890 MHz
CNR	47 dB
CSO, CTB	<-55 dBc
RF output level (AGC)	80 ± 2.5 dBμV
Filtered from WAN interface via internal WDM filter	
Remote management via OMCI	
Up to two optional low-pass RF filters (remotely manageable)*	

Emissions and safety regulations

CE approved, FCC on request

Safety:

- IEC EN 60950 or IEC EN 62368-1

Laser safety:

- IEC EN 60825-1: Class 1 laser

Emissions & Immunity:

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

RoHS/WEEE marking:

- Compliant with 2011/65/EU

Surge protection*

- Compliant with ITU-T K.21 basic level

Interoperable OLTs **

Including but not limited to:

- Atlas 1000A
- Calix E7
- Dasan V5824G
- Dasan V8106
- Huawei MA5600T
- Huawei MA5603T
- Huawei MA5608T
- Huawei MA5800T
- Keymile MileGate 2300
- Keymile MileGate 2510
- Saturn SOLT33-08P
- Saturn SOLT33-16P
- ZTE C300
- ZTE C600
- Zyxel 2406

User interfaces

- 1 x Unlock button
- 1 x LED dimming button
- 1x or 4x LAN interface
- 1 x Power connector
- 1 x CATV output coaxial F-female *

Status LEDs

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



* Applicable to selected model(s) only

** Depends on HW and FW configuration of the OLT

FiberTwist G2000-Series (GPON) product models

Model	Type	LAN interface	CATV	Remark
FiberTwist-G2110	Layer-2 GPON ONT	1x	-	-
FiberTwist-G2120B	Layer-2 GPON ONT	1x	Yes	-
FiberTwist-G2172B	Layer-2 GPON ONT	1x	Yes	CATV filters for Denmark
FiberTwist-G2410	Layer-2 GPON ONT	4x	-	-
FiberTwist-G2420	Layer-2 GPON ONT	4x	Yes	-
FiberTwist-G2472	Layer-2 GPON ONT	4x	Yes	CATV filters for Denmark

All models have wavelength blockers.

The Genesis FiberTwist G2000-Series supports the coexistence with CATV, XGS-PON, 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.