InterOS-NG

INDEPENDENT INTEROP

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

· With a 2.5 gigabit LAN port or 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

Genexis FiberTwist G2000-Series (GPON)

General specifications

Dimensions (H x W x D)	110x110x46 mm
Weight (G2110)	132 g
Weight (G2410)	176 g
Weight (G2420)	225 g
Power supply voltage	12 Vdc ± 5%
Operating temperature	0 - 40 °C
Storage temperature	0 - 70 °C

Power consumption (EU-CoC-BBE)

G2110C	2.3 W Idle Mode
	2.3 W On Mode
G2110C-2.5G	2.7 W Idle Mode
	2.7 W On Mode
G2120B	2.9 W Idle Mode
	5.0 W On Mode
G2410	2.8 W Idle Mode
	4.0 W On Mode
G2420 & G2472	5.1 W Idle Mode
	6.2 W On Mode

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 *

LAN interface(s)

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

Compliant with IEEE 802.3
   (2500/1000/100Base-T)*

LED indicators for link and activity

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

TRx allows co-existence with, CATV, XGS-
   PON, XG-PON and NG-PON2*

Interoperable with the major OLT brands in
   triple-play configurations

128 GEM ports (GPON Encapsulation Method)

32 T-CONT (Transmission Containers)

CATV*

Wavelength (typical)	1550 nm
Optical return loss	min 45 dB
RF passband	45-900 MHz
RF output impedance	75 Ω
F-Connector length	11 mm
AGC optical input power	-9 ... 0 dBm
RF output level (AGC on) according to CENELEC-42	80 ± 2.5 dBµV 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

Remote enabling of CATV

Remote management via OMCI

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

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.

Status LEDs

Power	⏻
Fiber uplink status	< >
Alarm*	-¡-
LAN*	品
CATV status*	⬜

Applicable to selected model(s) only

FiberTwist G2000-Series (GPON) product models

Model	Type	1GE LAN	2.5GE LAN	CATV	Remark
FiberTwist G2110C	Layer-2 GPON ONT	1x	-	-	-
FiberTwist G2110C-2.5G	Layer-2 GPON ONT	-	1x	-	-
FiberTwist G2120B	Layer-2 GPON ONT	1x	-	Yes	-
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 Genexis FiberTwist G2000-Series supports the coexistence with, CATV, XGS-PON, XG-PON, and NG-PON2 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.