



Genexis FiberTwist

P2400C-2.5G-Series (PtP)

Compact network demarcation



The highly successful FiberTwist ONTs have proven itself as a flexible and reliable solution. Added to the extensive portfolio is the new series with 2.5G speeds. Perfect for when the market demands higher speeds, but the step to 10G is too big. Easily upgrade from 1G tot 2.5G PtP while staying on the same wavelength for greater efficiency and faster speeds.

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 Point-to-Point network demarcation
- Patented FiberTwist twist-on interface that fits all FiberTwist FTUs and Bracket; enabling a trouble-free, real DIY end-user installation
- One 2.5 Gigabit LAN port to meet the higher speed demand of connected devices in the home
- Three Gigabit LAN ports to connect additional external devices to the network terminator
- Optional integrated CATV receiver
- Flexible management via i.a. TR-069 and CloudSight
- ITU-T K.21 Basic level (Surge Protection)
- Halogen-free PCB
- Enhanced LED dimming

A perfect Match for every deployment scenario

The Genexis 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.

The FiberTwist P2400C-2.5G-Series is the perfect next step in a Point-to-Point network to enable higher speeds in every deployment scenario.

Product features and specifications



Genexis FiberTwist P2400C-2.5G-Series (PtP)

General specifications

Dimensions (H x W x D) 110x110x46 mm

Weight

- P2410C-2.5G TBD
- P2411C-2.5G TBD
- P2420C-2.5G TBD

Operating temperature 0 - 45 °C

Storage temperature -25 - 55 °C

Operating humidity 5% - 95%

Storage humidity 10% - 95%

Flame retardants Halogen free

Power supply voltage 12 Vdc ± 5%

LAN interfaces

1x 100/1000/2500 Base-T RJ45 port

3x 10/100/1000 Base-T RJ45 ports

LED indicators for speed and activity

IEEE802.3az Energy Efficient Ethernet (EEE)

User interfaces

1 x Unlock button

1 x LED dimming button

4x LAN interface

1 x Power connector

1 x Reset button

1 x CATV output coaxial F-female*

Model	Ready Mode	On Mode
P2410C-2.5G	TBD	TBD
P2411C-2.5G	TBD	TBD
P2420C-2.5G	TBD	TBD

Fiber (WAN) interface

Optics compliant with 2500BASE-BX20U and 1000BASE-BX20U

TX (upstream) power -4 ... 0 dBm

RX sensitivity -27 dBm

TX wavelength (typical) 1310 nm

RX wavelength (typical)

• FiberTwist P2410C-2.5G 1490 & 1550 nm

• FiberTwist P2411C-2.5G 1490 nm

• FiberTwist P2420C-2.5G 1490 nm

Single mode fiber ITU-T G.657.A2

Optical connector SC/APC

Optical Range Up to 20km

Digital Diagnostic Monitoring (DDM)

Configurable optical blackout (for OTDR)

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 TR-069

* Applicable to selected models only

Note: More features are available and not listed in this document. Not every listed feature may be included in the shipping product.

Genexis reserves the right to make changes of technical specifications, housing or design without prior notice.

Product features and specifications



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Layer 2 features

Jumbo up to 9K supported on WAN and LAN
Non-blocking switching performance
Up to 8K MAC addresses
Automatic learning and aging
IEEE 802.1Q VLAN support for 4096 VLANs
VLAN classification and retagging (VLAN mapping)
Port-based VLANs
IEEE 802.1ad QinQ VLAN tagging
Port Trunking and Monitoring/Mirroring
Layer 2 loop prevention

Quality of Service (QoS)

8 QoS traffic classes
Port based QoS
IEEE 802.1p tagged frames
IPv4 QoS Type of Service (ToS)
IPv4 QoS Differentiated Services (DS)
IPv6 QoS Traffic Class
Strict, weighted, or mixed mode per port

Management

DHCP/TFTP, HTTP
TR-069, TR-369, TR-181
CLI
CloudSight
Ethernet OAM including dying gasp
GUI

IGMP

IGMP/MLD (v2/v3) snooping and proxy
Configurable parameters for e.g. robustness, fast leave and snooping behavior

Emissions and safety regulations

CE 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
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

Genexis FiberTwist P2400C-2.5G-Series product models

Model	Type	WAN (Mbps)	1GE LAN	2.5GE LAN	Wavelength		
					TX	RX	CATV
FiberTwist P2410C-2.5G	Layer-2 PtP ONT	2500	3x	1x	1310 nm	1490 nm & 1550 nm	-
FiberTwist P2411C-2.5G	Layer-2 PtP ONT	2500	3x	1x	1310 nm	1490 nm	-
FiberTwist P2420C-2.5G	Layer-2 PtP ONT	2500	3x	1x	1310 nm	1490 nm	Yes

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