Genexis FiberTwist

PX2000-Series (10G PtP)

Compact and high-speed network demarcation

GenXOS

IOPSYSWRT BASED

Where GPON and Point-to-Point (PtP) are starting to hit bandwidth limitations, 10G provides a solution. The well-known FiberTwist now offers an easy Do-It-Yourself (DIY) upgrade path from PtP to 10G Point-to-Point: increasing the end-user's bandwidth with a single twist.

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 and high-speed 10G Point-to-Point 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

· 1x 10GE LAN, and 2x GE LAN ports to connect external devices, such as a Residential Gateway

· Flexible management via e.g. TR-069 and CloudSight

· ITU-T K.21 Basic level (Surge Protection)

· Halogen-free PCB

· Enhanced LED dimming

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 PX2000-Series (10G PtP)

Environment

Dimensions (H x W x D)	110x110x46 mm
Weight	253 g
Operating temperature	0 - 40 ºC
Operating humidity	5% ~ 95%
(non-condensing)	
Storage temperature	-25 - 55 ºC
Storage humidity	10% ~ 100%
(non-condensing)	
Flame retardants	Halogen free

Power consumption (EU-CoC-BBE)

PX2310	6.0 W Idle Mode
	9.3 W On Mode

Fiber (WAN) interface

Optics compliant with 10GB-BX20-U

TX wavelength (typical)	1270 nm
RX wavelength (typical)	1330 nm
Single mode fiber	ITU-T G.657.A2
Optical connector	SC/APC
Optical Range	Up to 20km

Digital Diagnostic Monitoring (DDM)

LAN interfaces

1x 10GE: Compliant with 1000/2.5G/5G/10G BASE-T
· IEEE 802.3an-2006 for 10G
· 802.3bz (nbase-t 2,5G/5G)
2x GE: Compliant with 10/100/1000 BASE-T
LED indicators for speed and activity
IEEE802.3az Engery Efficient Ethernet (EEE)

User interfaces

1 x Unlock button
1 x LED dimming button
1x 10GE and 2x GE LAN interfaces
1 x Power connector
1 x Power button
1 x Reset button

Layer 2 features

Jumbo frame support up to 2k (WAN) / 9k (LAN)
Non-blocking switching performance
Up to 8K MAC addresses
Automatic learning and aging
IEEE 802.1Q VLAN support
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)

4 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

IGMP

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

Management

DHCP/TFTP, HTTP
TR-069, TR-181
CLI
CloudSight
GUI

Emissions and safety regulations

CE approved
Safety:
· IEC EN 62368-1
Laser safety:
· IEC EN 60825-1: Class 1 laser
Emissions & Immunity:
· EN 55032/CISPR 32:2008, Class B
· EN 55035
RoHS/REACH compliant
WEEE compliant
Surge protection
· Compliant with ITU-T K.21 basic level
UKCA approved

Status LEDs

Power
Fiber uplink status
2x per LAN/RJ-45

FiberTwist PX2000-Series (10G PtP) product models

Model	Type	10GE LAN	GE LAN	Wavelength	
				TX	RX
FiberTwist PX2310	Layer-2 10G Point-to-Point NT	1x	2x	1270 nm	1330 nm

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.