



Genexis FiberTwist

P6000-Series Point-to-Point (PtP)

The all-in-one fiber gateway



From our Connected Home product line, we present the FiberTwist P6000-Series. It is our all-in-one fiber gateway. Perfect for homes and apartments where the fiber is terminated in the living area.

Featuring Wi-Fi 6 (5400 Mbps), Wi-Fi EasyMesh™, 4 LAN ports, 2 voice ports and optional CATV. Allowing you to turn a fiber connection into a fiber experience.

Key features

- All-in-one fiber gateway
- Both Point-to-Point as GPON (see G6000 GPON datasheet)
- Compatible with all FiberTwist FTUs
- Easy installation and set-up
- EasyTouch Pairing with selected Genexis extenders
- True Do-It-Yourself mechanism
- 802.11ax (Wi-Fi 6)
- Wi-Fi EasyMesh™
- 5GHz (4x4) and 2.4GHz (2x2) radio design
- Analogue telephony support
- Support for cable Set-Top Box (optional)
- Genexis CloudSight compatible

Its true Do-It-Yourself mechanism allows the end-users to install the gateway directly to the fiber by twisting it onto the fiber termination unit. No more expensive installers needed!

The FiberTwist 6000-Series is designed for both Point-to-Point networks as well as GPON networks (see G6000-Series GPON datasheet) and is compatible with all FiberTwist FTUs and brackets.

One device for a complete fiber experience

The FiberTwist product line now includes an all-in-one active unit. This means it is not necessary anymore to add an extra device (e.g., Residential Gateway) or include a cable infrastructure in homes where space is limited.

Point-to-Point, GPON, voice and/or CATV? The FiberTwist 6000-Series covers all possible scenarios, it is up to you to select the desired model.

All possible models come with the latest Wi-Fi 6 technologies, providing the end-user with quality WiFi at all time. In other words, end-users can now get the full fiber experience from one single device.

If there is a need to extend the WiFi coverage in the home, the FiberTwist P6000-Series can be extended with an additional extender supporting the Wi-Fi EasyMesh™ standard (e.g., see Pulse EX600 datasheet).



Product features and specifications

Genexis FiberTwist P6000-Series (PtP)

General specifications

Dimensions (H x W x D)	180x180x57 mm
Power supply voltage	12 Vdc ± 5% 2A
Operating temperature	0 - 40 °C
Storage temperature	-25 - 70 °C
Relative humidity	10% - 95%

Power consumption (EU-CoC-BBE)

P6414 & P6416	8.7 W Idle Mode 10.7 W On Mode
P6426	10.2 W Idle Mode 12.4 W On Mode

Fiber (WAN) interface

Optics compliant with 1000BASE-BX20-U	
Tx wavelength	1310 nm
Rx wavelength	1490 nm
Optical input range	-23 ... -3 dBm
SC/APC connector	

LAN interface

4x 10/100/1000 Base-T Ethernet RJ45 ports

WLAN interface

2x2 MU-MIMO 802.11ax 2.4 GHz WiFi
4x4 MU-MIMO 802.11ax 5 GHz WiFi

User interfaces

Power connector
Power switch
Reset button
WPS button
RGB status LED
Device status LEDs for Uplink, Internet, Telephony, WiFi and CATV (optional)
End-user web based GUI

Voice interface

2x FXS RJ11 ports

USB interface

1x USB 2.0 port

Wireless features

Wi-Fi MultiMedia (WMM)
Wi-Fi Protected Setup (WPS)
Wi-Fi Security (WPA2 and WPA3)
Wi-Fi EasyMesh™ R2
DFS and Radar Detection
Multiple SSID and hidden SSID
Guest network SSID

Gateway features

NAT/PAT, DHCP, DNS
NTP, RTSP
Stateful Packet Inspection Firewall (SPIF)
DMZ, uPnP, Port forwarding

Ethernet features

IPv4 and IPv6 dual IP stack
VLAN (un)tagging, Q-in-Q, QoS
PPPoE, L2TP, IGMPv3

Voice features

SIP based Voice-over-IP
G.711 A-law / μ -law codec
G.729 codec
5 REN support
Line Echo Cancellation
DTMF: In-band, RFC2833, SIP-Info
Class 5 features

Management and control

SNMP
TR-069, TR369
TR-181, TR-104 data models
Command Line Interface (CLI)
WebGUI
Genexis EasyWiFi App
Genexis CloudSight
Fail-safe firmware upgrade

CATV interface*

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 dB μ V 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	

Regulatory compliance

Radio Equipment Directive 2014/53/EU
Energy Related Products Directive 2009/125 EC
CE Safety Directive 2014/35/EU
RoHS and REACH Directive 2011/65/EU
ITU-T K.21 standard compliancy

* Applicable to selected models only

Genexis FiberTwist P6000-Series product models

Model	AON WAN (Mbps)	LAN	WLAN 2x2 2.4 GHz	WLAN 4x4 5.0 GHz	FXS	USB	Wavelength		
							Tx	Rx	CATV
FiberTwist P6414	1000	4x	11ax	11ax	2x	1x	1310 nm	1490 nm	-
FiberTwist P6416	1000	4x	11ax	11ax	2x	1x	1310 nm	1490 & 1550 nm	-
FiberTwist P6426	1000	4x	11ax	11ax	2x	1x	1310 nm	1490 nm	Yes

Note:

- FiberTwist P6414 is available upon request, please contact your sales representative

- 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.