Delivering Gigabit to the Home

Positron G.hn to Ethernet Managed Demarcation Point



G2501-C



Retrofitting an existing (brownfield) Multi-Dwelling Unit (MDU) with fiber is complex and expensive. The G2501-C Managed Demarcation Point complements the Positron GAM family to deliver up to 1.4 Gbps Ethernet access to subscribers in MDUs over the existing coaxial infrastructure at a fraction of the cost of alternatives solutions.

Introducing G.hn

The ITU-T G.9960 G.hn Wave-2 standard is designed to leverage the existing telephone wiring (UTP, CAT-3 or CAT-5/5e) or RG-6/RG-59 coax cabling with an access technology that delivers up to 1.4 Gigabit Ethernet to each subscriber at a lower cost and without the complexity and delays associated with in-building fiber installation.

About the G2501-C Managed Demarcation Point

The Positron G2501-C Coax to Ethernet Bridge is a Managed Demarcation Point that connects to a Residential Gateway (RG).

Doc#: G2501C 200525

Specifications

Environmental	
Dimensions	2.6” Width x 1.25” Height x 4” Depth / 66 mm W x 32 mm H x 102 mm D
LED	Power, RJ45 ports link/active, G.hn link
Power Source	(included with the G2501-C) (5Vdc/2A USB-C adapter)
Power Consumption	Less than 6W
Certification	CE Mark, FCC Part 15 Class B UL/CSA 62368-1:2018
Operating Temperature	0ºC to +40ºC
Storage Temperature	-25ºC to +80ºC
Operating Humidity	5% to 95% relative, non-condensing
G.hn Specification	
G.hn Standards	G.hn Wave-2 Client Based on GigaWire Alliance specification and fully compliant with the following ITU-T standards • G.9960 Amendment 2 - System Architecture and PHY Layer • G.9961 Data Link Layer • G.9962 Management • G.9964 PSD
Point-to-Multipoint support	Point-to-Multipoint operation for up to sixteen (16) G2501-C devices per G.hn port
Ease of Operation	Automatic firmware and configuration management via the Positron GAM
Encryption	AES-128 encryption with individual keys for each end-node under the control of the Positron GAM acting as the Master Node
Modulation and Frequency Band	Supports OFDM 200 MHz Radio Band Notching function allows cohabitation with legacy Analog Cable TV channels over coax
Bandwidth Management	Up to 1.7 Gbps with Dynamic Bandwidth Allocation to optimize throughput based on nature of traffic flows with TDD Multiplexing for programmable upstream / downstream ratio
Reliability and Resiliency	State of the art LDPC Forward Error Correction (FEC)

Ordering Information

Part Number	Description
G2501-C	G.hn Wave-2 to Ethernet Bridge over Coax G.hn port (F-type male connector) One (1) 2500/1000/100/10Mbps Ethernet RJ45 port