"Results You Can Count On"

Model GHN-SP-UPLC

Universal Powerline Communications Splitter For Physical-Layer Testing of G.hn Devices Over Power Lines

The Universal Powerline Communications Splitter device is used to provide a controlled AC port to the PLC modem, separate and isolate the high-frequency PLC signal from AC power, and make it accessible on three BNC ports labelled L1, L2 and L3 with a controlled impedance. Having the PLC signal on BNC ports allows using standard instruments and accessories to perform measurements and build controlled topologies. Capable of performing Dynamic PSD Test and Cognitive Frequency Exclusion test (Dynamic Notching) per EN 50561-1 using Model 501 and 501-Probe-Coax.

Main Features

- Similar to AMN / LISN specified in CISPR-16, extending the concept to all three lines
- Suitable for all types of broadband MIMO PLC (not valid for narrowband PLC < 2 MHz)
- Basic building block for TR-208 and EN-50561 tests
- High performance AC filter which provides high isolation with similar common-mode and differential-mode impedance on each line, L1, L2 and L3
- Provides galvanic isolation and common-mode filtering to prevent PLC leakage on data port
- BNC connectors for High Frequency signals on L1, L2, and L3
- Embedded Zero-Cross Detector for AC-synchronized measurements and tests
- Used with Telebyte Noise Generator for WT-208 testing
- Used with Telebyte Digital Analyzer for ITU-G.9964 PSD, CENELEC EN 50561-1, EN 50561-3 measurements

Model GHN-SP-UPLC

Specifications

GHN-SP-UPLC Specifications	
Electrical Safety	Complies with EN 61010-1 : EN 60950-1
Insertion Loss (Single Line)	EUT to BNC OUT (L1-L3): 0.35dB@ 80 MHz, 0.45dB@ 100 MHz
Differential Line Impedance	100 ohm +/- 10% (1MHz to 100 MHz)
Continuous Operating Voltage	90 to 240VAC, 50 Hz/60 Hz
Outputs: L1, L2, L3	BNC-female Connector, 50 Ω Impedance, 1MHz to 100MHz

Specifications are subject to change without notice. Made in USA.

Model GHN-SP-SPLCOMB-UPLC-EU-3

The GHN-SP-SPLCOMB-EU-3 is a symmetrical power splitter and combiner where all the ports have 6 dB attenuation to each other.

The 3-Channel Splitter/Combiner provides one set of three BNC ports on one side and two sets on either side. The spacing between connectors is the same as in the GHN-SP-UPLC Universal Powerline Communications Splitter, allowing the device to be connected directly using male-male BNC barrels to reduce the number of cables. (Unused ports of the 3-Channel Power Splitter/Combiner must be terminated with 50Ω.)

Ordering Options

GHN-SP-UPLC-EU	Universal PLC Splitter (European version)
Approved Power Adaptors for GHN-SP-UPLC-EU	• GHN-ADP-CH_BR-EU (Switzerland, Brazil) • GHN-ADP-UK-EU (United Kingdom) • GHN-ADP-IT_RCH-EU (Italy, Chile) • GHN-ADP-AU_RCN_AR-EU (Australia, China, Argentina) • GHN-ADP-NA (North America)
GHN-SP-SPLCOMB-UPLC-EU-3	3-Channel Splitter/Combiner

Model GHN-ADP-NA

Model GHN-ADP-NA adaptor (North America)
for GHN-SP-UPLC-EU

Note:

Accessories such as Ethernet cables and attenuators are not included.

EN 50561-1 test also requires GHN-SP-SPLCOMB-UPLC-EU-3 (3-channel splitter/combiner) and the GHN-BALUN50_100-UPLC-PH (50-100-ohm Balun).