

Introduction

This 3-phase coupler is designed couple power line carrier signals from low voltage (12 VDC signal) of i.Lon SmartServer to all three phases up to 277V on AC mains. The power line communications are based on ISO 14908 standard. It can be used to couple street light networks or to communicate with devices on all three phases of power networks.

Signal can also be coupled from a single phase to all 3 phases. When the signal is fed into 1 phase, the phase coupler connects all 3 phases with each other so that these become permeable to the power line signal. Integral coupling between phases boosts performance for devices that communicate between different phases.

This coupler supports C-band application in range 115-140 K Hz (C-Band). Built in phase coupling between L1, L2 and L3 provides phase to phase coupling of power line carrier signals. Phase coupling provides a more reliable signal path between phases instead of relying on coupling through building wiring. This product is also a handy diagnostic tool for monitoring power line communications using spectrum analyzers and oscilloscopes. One can connect the PLT+/PLT- terminals to the spectrum analyzer or the oscilloscope to view the power line communications waveforms.



Features

- Qualified 3-phase coupler for certain Echelon's i.Lon SmartServer
- Safety isolation between AC mains and PLT+/- terminals
- Integrated phase coupling
- Convenient DIN rail mounting

Application

- Communicating devices connected with different phases.
- Diagnostic tool for monitor power line carrier signals on an oscilloscope or spectrum analyzer.
- Attach the PLT+/- terminals to your test equipment to analyze noise sources, observe signal levels, and quickly diagnose communications/performance issues.

Specifications

Operating/Storage Temperature	-40° C to 85° C
Voltage for L1 to N, L2 to N, or L3 to N	80 to 305VAC
Voltage Drive PLT+ to PLT- (Max)	10V P-P @115KHz to 140Khz
Humidity (operating)	10 to 90% @ 50º C
Hi-Pot Test	3750 V RMS
Terminal Blocks- Wire gauge	12 AWG- 24AWG
Dimensions	53.30 x 90.2x 57.50mm
Approvals/Qualification	Pending

For more detailed information visit http://energy.slscorp.com or send us an email to energy@slscorp.com