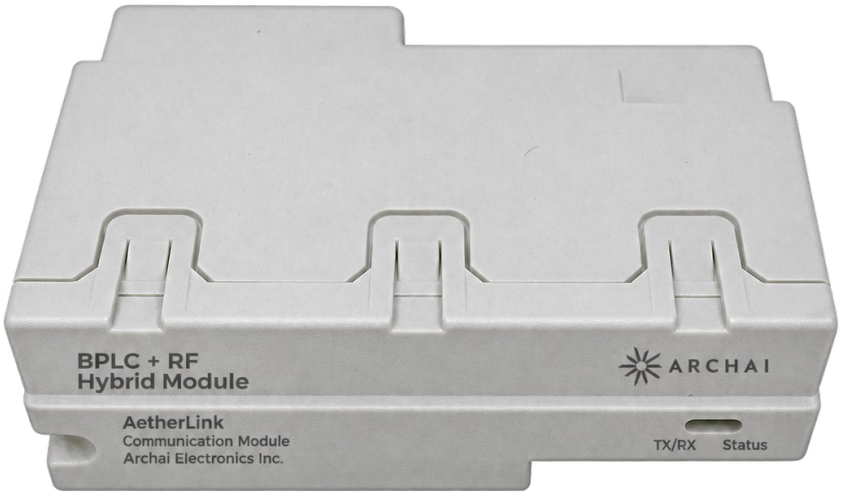
AETHERLINK / DUAL-MEDIA COMMUNICATION

BPLC + RF Hybrid Module

Broadband power-line and radio communication for compatible smart-meter networks.



Product visualisation · appearance depends on configuration

Product overview

The AetherLink BPLC + RF Hybrid Module combines broadband power-line communication with high-frequency radio in a dual-channel design. It is intended to exchange data between compatible smart meters and gateways over a low-voltage metering network. A microcontroller supports the communications functions, with OFDM modulation and multi-frequency operation described for the hybrid design. The combination allows the project team to consider power-line and radio paths together. The applicable PLC implementation, radio configuration and channel behaviour are defined by the selected host and gateway configuration.

Key capabilities

Broadband PLC with RF. The module brings BPLC and radio into a single communications assembly for a compatible host meter.

Dual-channel design. Two communications channels support hybrid network architectures; their operating policy is agreed for the implementation.

OFDM and multi-frequency operation. The design addresses communication over networks with varying interference and propagation conditions.

Meter-to-gateway integration. The module provides the communications link; meter functions and upstream system behaviour remain host- and gateway-dependent.

Application fit

Hybrid low-voltage AMI networks that specify broadband PLC and RF communication between meters and gateways.

FUNCTIONAL CHARACTERISTICS / INTEGRATION

Specify the complete configuration.

Match the module to its host and network before selecting the delivered variant.

CHARACTERISTIC	PRODUCT INFORMATION
Communication media	Broadband power-line communication (BPLC) and high-frequency RF
Channel architecture	Dual-channel design
Modulation	OFDM described for the hybrid communications design
Frequency operation	Multi-frequency operation; exact bands depend on configuration
Processing	Microcontroller-based communications control
Host integration	Plug-in module for a compatible smart meter
Network role	Meter-to-gateway communication within a low-voltage metering network

System context

HOST	COMMUNICATIONS PATH	NETWORK ENDPOINT
Compatible meter	Power line + RF	Compatible gateway

System context is illustrative. Host application protocols, upstream services and interoperability depend on the complete implementation.

Integration considerations

Host and gateway compatibility. Agree the BPLC implementation, radio support, meter interface and firmware for the selected host and gateway.

Channel behaviour. Specify how the BPLC and RF channels are used. Automatic failover, simultaneous traffic handling and routing policy require implementation-specific confirmation.

Deployment configuration. Confirm the operating bands, antenna arrangement, coupling requirements and local radio requirements for the intended installation.

CONFIGURATION SCOPE BPLC and G3-PLC are separate product choices; neither protocol compatibility nor channel behaviour should be inferred from a shared housing.

Supply limits, connector details, dimensions, environmental ratings, operating bands and quantitative performance are specified for the selected configuration. Request the applicable integration data from Archai.

Discuss your configuration

Share the host meter, destination market, network technology and integration requirements with Archai.

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