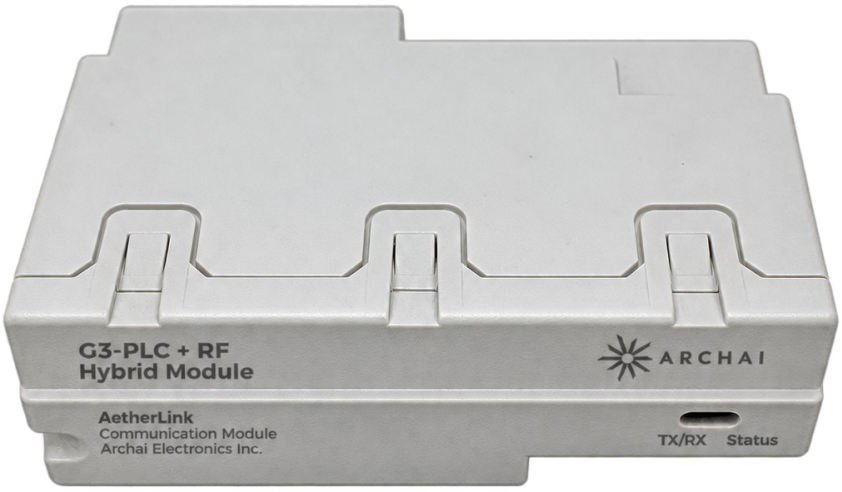
AETHERLINK / DUAL-MEDIA COMMUNICATION

G3-PLC + RF Hybrid Module

G3-PLC and radio communication in a plug-in module for compatible smart meters.



Product visualisation · appearance depends on configuration

Product overview

The AetherLink G3-PLC + RF Hybrid Module combines power-line communication and high-frequency radio in a dual-channel design. It provides a communications path between compatible smart meters and gateways within low-voltage metering networks. The module incorporates a microcontroller and uses OFDM modulation and multi-frequency operation. This hybrid approach gives the AMI designer two communication media to consider within the selected network architecture. The meter interface, radio configuration and operation of the two channels must be matched to the host and gateway implementation.

Key capabilities

Two communication media. G3-PLC and RF are combined in one module, supporting projects that require both power-line and radio communication.

Dual-channel architecture. The communications design provides two channels; channel selection and coordination depend on the implemented meter and network configuration.

OFDM and multi-frequency operation. These techniques support communication in networks subject to interference and changing propagation conditions.

Plug-in integration. The module is intended for a compatible host meter, with the electrical interface and mechanical fit agreed for the selected configuration.

Application fit

Hybrid AMI access networks connecting compatible low-voltage meters to an appropriately configured gateway.

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	G3-PLC 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 electrical interface, mechanical envelope, firmware and gateway support for both communication paths.

Channel behaviour. Define the required operation of each channel. A dual-channel design does not, by itself, specify automatic failover, concurrent operation or a routing policy.

Deployment configuration. Confirm the PLC profile, RF band, antenna arrangement and destination-market requirements before selecting the delivered variant.

CONFIGURATION SCOPE Dual-channel behaviour is implementation-dependent; no automatic-failover performance is specified in this datasheet.

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.

sales@archai.co.kr | www.archai.co.kr