

Bi-Directional PLC Filter For Narrow-Band Communication

Firewall for your PLC network protects integrity of your power line communi-

Narrow-band power line communication (PLC) is widely used for communication and control of equipment over power lines. It is also an integral part of Smart Power. The problem is, because power lines connect all equipment together, PLC signals from different sources can conflict with each other and cause malfunction of equipment and data errors. Equally, EMI on power lines can also interfere, or even disable communication.

OnFILTER' unique bi-directional PLC filter blocks propagation of narrow-band PLC communication without disabling it, allowing for two independent PLC networks to coexist on the same power lines without interference. The filter resolves communication conflicts and optimizes the network architecture. Each of PLC networks now can operate on the same power lines on different sides of the filter.



Applications

- Industrial control
- Utilities
- Control panel UL 508A
- Oil and gas industry
- Water management
- Robotics
- Buildings
- Wherever PLC c is a problem

Features

- Two independent PLC areas on the same AC phase
- Blocks PLC from certain area or to create separate PLC domains
- Blocks interfering EMI
- Majority of narrow-band standards

Blocks But Doesn't Disable

AM2020NG filter blocks propagation of narrow-band PLC signals while preserving communication for the areas where it is needed

Two Independent PLC Domains

AM2020NG splits AC mains into two different areas where separate power line communication is possible without affecting PLC in another area

Majority of Narrow Band PLC Standards

AM2020NG works with most of narrow band PLC world standard—please check the back of this brochure

Blocks Interfering EMI

Use this filter to block interfering EMI from your PLC domain and improve its operability

AM2020NG
Bi-Directional PLC Filter
Narrow-Band
DIN-Rail Mounted

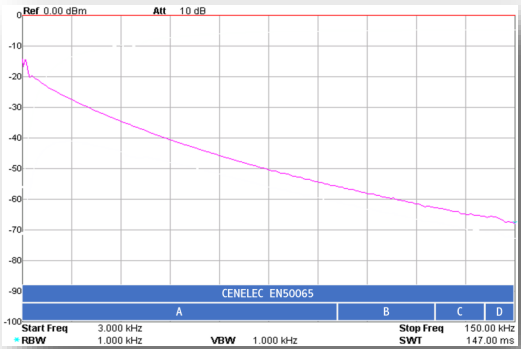
Suitable for UL 508A Panels

PLC Filter Performance

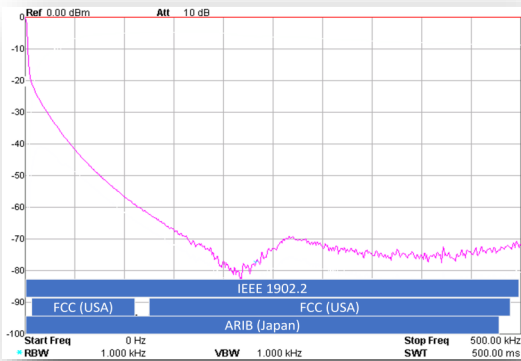
Narrow-band bi-directional PLC filter AM2020NG allows AC power to pass unimpeded, while non-destructively stopping high-frequency communication signals riding on these power lines from passing through. You can use AM2020NG to either block PLC signals from a particular circuit, or allow simultaneous operation of two independent PLC networks on the same power line. AM2020NG filters work with the majority of worldwide narrow-band PLC standards.

Specification

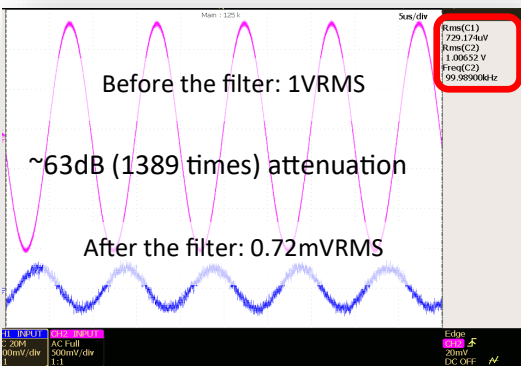
Parameter	Value
Rated Voltage	250VAC RMS Max.
Rated Current	20A RMS Max.
Enclosure width	45mm (1.77") wide
Termination	Removable terminal block inserts
Wire Gauge	AWG 24...12
AM2020NG qualifies for UL 508A panels by being certified to UL/IEC 60939	



Typical Attenuation at Lower Frequencies

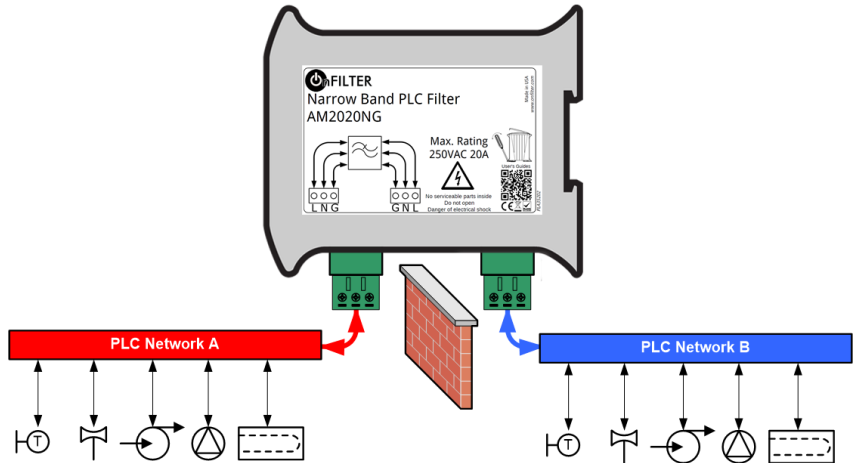


Typical Attenuation at Higher Frequencies

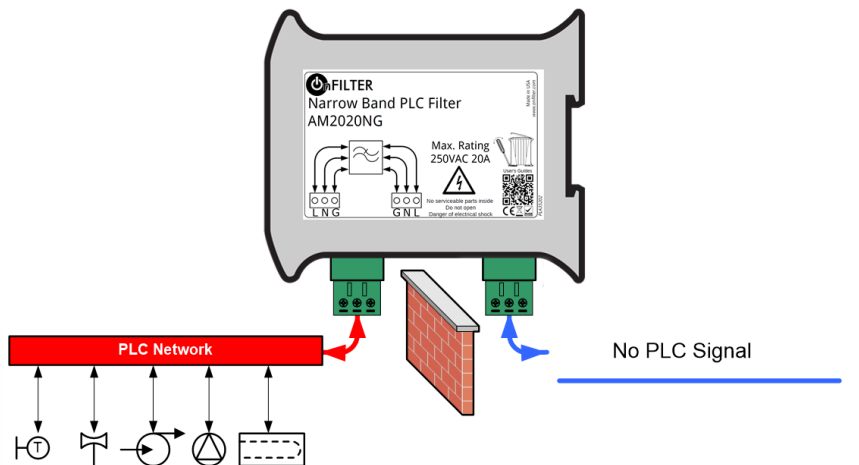


Example of attenuation at 100kHz

Application Examples



AM2020NG allows two independent PLC networks on the same phase



AM2020NG blocks PLC signals from interfering with other electronics

Ordering Information

Narrow Band PLC Filter

Model	Rating	Mount
AM2020NG	250V 20A	DIN Rail



OnFILTER, Inc.
 730 Mission Dr. Ste. 102
 Santa Cruz, CA 95060
 U.S.A.
 Tel. +1.831.824.4052
 FAX +1.206.350.7458
www.onfilter.com
info@onfilter.com

