

Ground EMI Filter

DIN Rail Mounted

- Provide Your Equipment with EMI-Free Ground
- Reduce Equipment Malfunction and Errors
- Improve Repeatability of Your Process

Unwanted high-frequency signals (EMI—electromagnetic interference) on ground (or “earth”) are a common cause of equipment malfunction, data errors, and even component damage. Ground connects all your equipment in one network. All it takes is for one excessively “noisy” tool anywhere to inject unacceptably high levels of electrical noise into your ground network. Ground is supposed to be an absolute zero reference for all electronic; high-frequency signals on ground make this reference fluctuate causing a multitude of problems.

OnFILTER’ patented ground filters block propagation of EMI while maintaining integrity and safety of your grounding. These patented filters help to protect your sensitive equipment from adverse effects of EMI. Connect ground of your panel a facility ground via this filter to provide clean ground connection to your sensitive devices and equipment.



Applications

Control panels
 Industrial control
 Oil and gas industry
 Control panel UL 508A
 Automated tools
 Photovoltaic / Solar
 Semiconductor fabrication
 Electronic assembly
 LED lighting
 Wherever EMI is a concern

Features

Easy installation
 Safety certified
 508A panel compliant
 Optimized for ground lines
 Effective noise suppression
 for all types of noise
 Applications for equipment with
 current consumption up to 30A

Noise-Free Ground

OnFILTER’ ground line filters reduce equipment downtime caused by EMI and increase its performance and productivity by providing clean ground reference for your sensitive electronics

Improved Equipment Operation in Adverse EMI Environment

Industrial equipment can inject high-levels of EMI in ground, polluting the entire ground network in the panel, or in the facility. PWM motors (servo, steppers, VFD) are especially prone to pollute ground with EMI. You can use GLV30-1 to block EMI on ground to sensitive parts of your equipment from contaminating the entire panel (see also our servo/VFD motor filters)

Safety Standards Compliant

Ground is first a safety element, and safety is always a priority. Patented GLV30-1 filters are compliant with UL1283 and can be used with any ground circuit with equipment consuming up to 30A

Wide Range of Applications

GLV30-1 can be used in many ways—filtering ground to a particular piece of equipment, block EMI from the entire control panel, or provide filtering for a part of the grounding network.

GLV30-1
Ground EMI Filter
GLV30-1
DIN Rail Mount

Suitable for UL 508A Panels



Specification

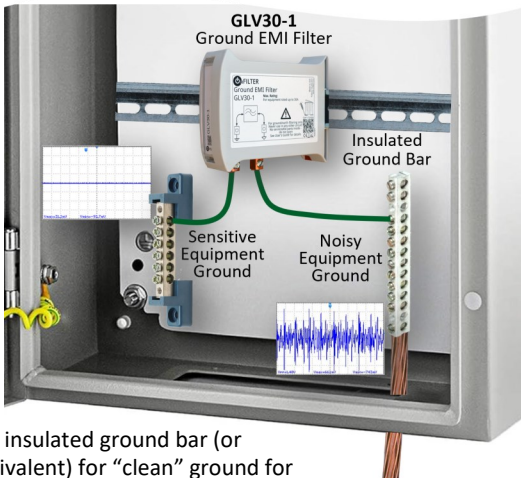
OnFILTER' ground EMI filter provides substantial reduction in propagation of noise in ground circuits, protecting proper operation of sensitive electronics.

Parameter	GLV30-1
Rated Max. Current, RMS	30A (Host equipment rating)
Power Line Frequency	50/60 Hz
DC Resistance	<0.2 Ohms
External Wire Gage	AWG14...6 1.6...4.1mm diameter
DIN Rail Case Width	35mm (1.38")

GLV30-1 qualifies for UL 508A panels by being certified to UL/IEC 60939

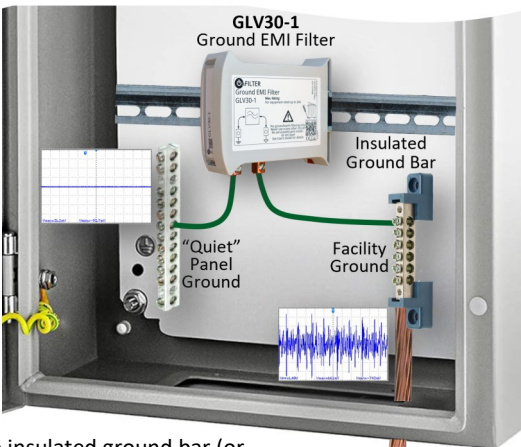
Ground EMI filters shall never be used in any circuit other than ground. Its current rating is for reference only and it must match or exceed equipment current rating for safety.

Typical Connections in a Panel



EMI Comes from both outside and internal sources

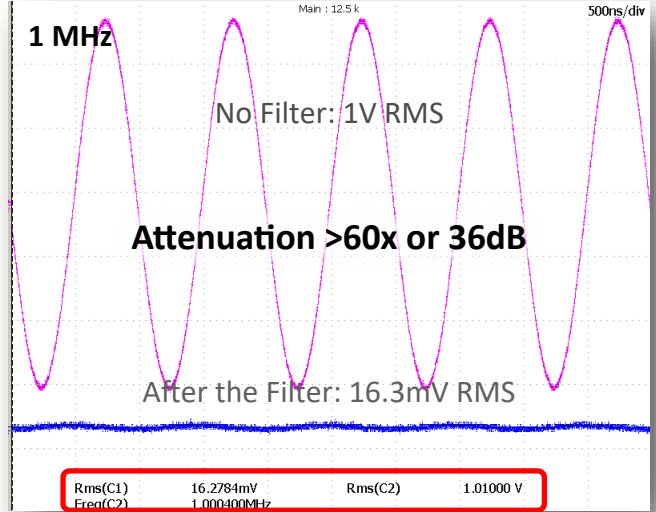
Use insulated ground bar (or equivalent) for "clean" ground for sensitive equipment



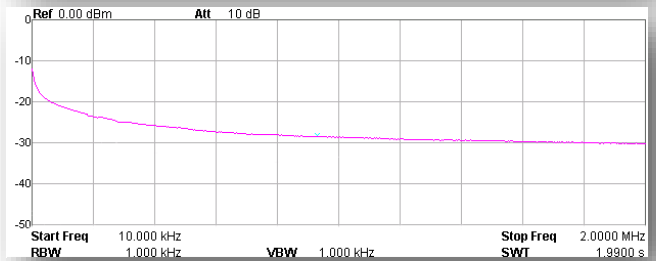
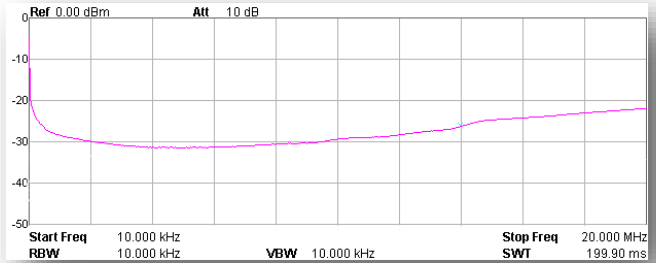
EMI Comes from the outside sources

Use insulated ground bar (or equivalent) for "dirty" incoming ground so that the ground for the entire panel is "clean"

Typical Time-Domain Data



Typical Frequency Domain Data



Need chassis-mounted ground filter? See our GLE30-1 with identical performance

Ordering Information

Ground EMI Filter Model	Mount
GLV30-1	DIN Rail



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