

# CleanSweep®

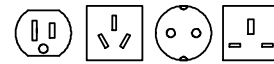
## 3A AC Power Line EMI Filters for Soldering Applications

### Reduce Electrical Overstress in Soldering

OnFILTER CleanSweep® EMI filters provide noise-free AC power for your workbench. Innovative design accomplishes maximum noise suppression of signals polluting your power lines, lowering harmful high-frequency electrical overstress (EOS) current to a negligible amount.

EOS caused by electromagnetic interference is caused mostly by noise on your power lines and ground. High levels of EOS cause component damage, including latent damage. Special design of OnFILTER CleanSweep® filters for soldering applications lowers EOS current tens or even hundreds of times by filtering out power line and ground noise.

CleanSweep® filters are very easy to install - just plug it into the wall outlet, plug your soldering iron into the outlet on the filter and connect ground of your workbench or circuit board to the filter's output ground.



Various configurations available

### Applications

- Electronic manufacturing
- Semiconductor fabrication
- Disk drive assembly
- Industrial robotics
- Military
- Wherever EOS is an issue

### Features

- Greatly reduced current from soldering irons
- Easy plug-in installation
- Optimized for power lines
- Effective noise suppression for all types of noise
- CleanSweep® filter family includes single and three phase models for up to 250V AC 30A

### Safe Soldering Environment

OnFILTER CleanSweep® filters greatly reduce high-frequency current from the tip of soldering irons in presence of noise on power lines and ground and by this greatly reduce high-frequency current from the tip of the iron.

### Transient Noise Suppression

Most of the noise on power lines is not continuous waveforms of high frequency but rather "spikes" generated by solenoids, relays, stepper and variable-frequency motors and alike. The peak value of these spikes can be very strong reaching several volts. OnFILTER CleanSweep® filters are especially effective for this type of signals.

### Differential and Common Mode Attenuation

OnFILTER CleanSweep® filters provide suppression for both types of noise - differential (between power line wires) and common-mode (between power line and ground).

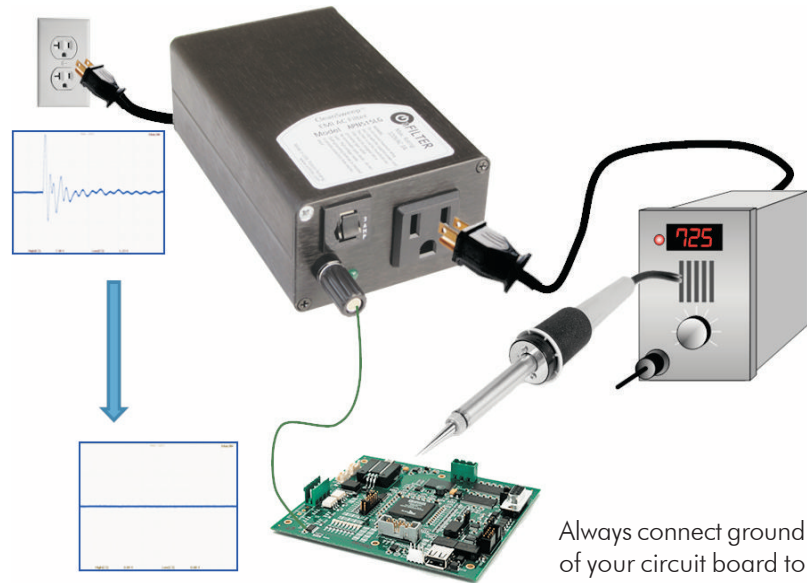
CleanSweep®  
Power Line AC Filters  
AP Series for  
Soldering Applications



# Specification

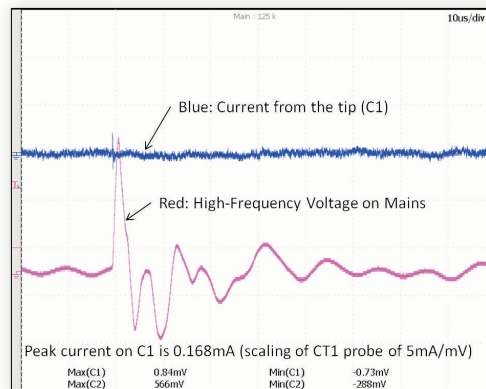
OnFILTER CleanSweep® filters utilize proprietary technology to provide maximum noise suppression and reduce high-frequency current during soldering.

Parameter	Value
Rated Voltage, RMS	110...250V AC
Rated Current, RMS	3A
Power Line Frequency	50/60 Hz
Transient Signal Attenuation (Typical)	
Differential Mode	24dB
Common Mode	20dB
Continuous Signal Attenuation (Typical)	
0.1/100 Ohms Interface	
Low Frequencies	50dB
High Frequencies	25dB
Power Indication	LED
Dimensions (WxDxH)	3.12"x1.85"x5.0" 80mmx47mmx127mm

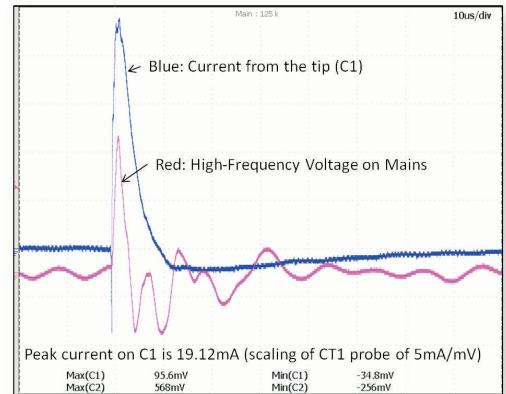


Proper bench setup with CleanSweep® filter

Always connect ground of your circuit board to the ground output of the filter, not to the facility ground



Current from the tip with CleanSweep® filter



Current from the tip without CleanSweep® filter

Other CleanSweep® models include single-phase, dual-phase and three-phase filters for up to 30A RMS and 250V AC with a variety of U.S. and international plug and outlet configurations.

# Ordering Information

Please select the type of filter most suitable for your application. Although there are many selection criteria, choosing the right filter is fairly simple. Most important parameter you need to select is the type of an outlet which will define voltage. Current rating for all soldering models is the same - 3A - which is sufficient for all soldering irons and majority of rework stations.

This example is for a 3A AC single-phase filter for US-type NEMA5-15 outlet with ground filtering for soldering application

Part Number: **APN515LG**

Type of Filter: 3A AC filter - AP

Outlet Code (see table): NEMA 5-15

Grounding: Soldering -L

Application: General - G

### Outlet Configuration

OUTLET ORDERING CODE	OUTLET ORDERING CODE
<b>N515</b> NEMA 5-15 ~125V 3A	<b>CN1A</b> CHINA ~250V 3A
<b>EUSK</b> SCHUKO ~250V 3A	<b>EUUK</b> U.K. ~250V 3A

Contact us for other configurations



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