

# Dual DC EMI Filter

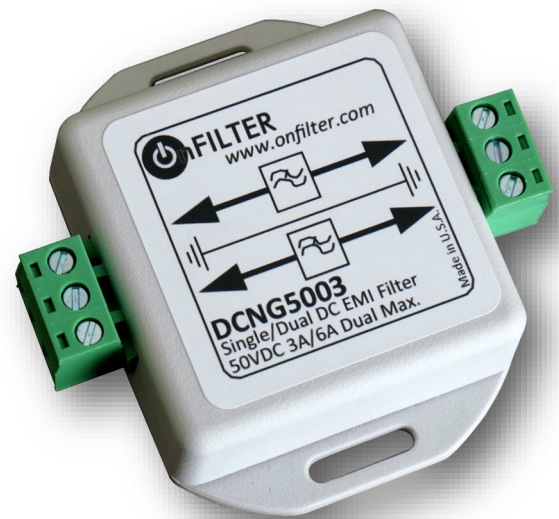
## 3/6A 50V

### Two EMI Filters in One Provide Clean EMI-Free DC Power to Your Sensitive Electronics

Switched mode power supplies are at the core of operation of most electronics. The problem is, some of them generate unacceptable levels of electrical noise, otherwise known as conducted electromagnetic interference (EMI), causing operation errors, malfunction and even device damage.

OnFILTER's DC EMI filters block EMI while passing unaltered DC power to your devices. The filters provide good attenuation where you need it—in the spectrum of operation of DC power supplies.

DCNG5003 is two independent EMI filters in one enclosure. Each of these independent filters provides up to 3A DC current; when connected in parallel they provide up to 6A DC current to your load. You can use the filter in multiple supplies environment, or to provide higher-current filtering for a single supply. See the back of this brochure for application examples and for performance data.



#### Applications

- Industrial control
- Automated tools
- Semiconductor fabrication
- Electronic assembly
- LED lighting
- Wherever EMI is a concern

#### Features

- Clean DC power
- Superior EMI suppression
- Symmetrical operation
- Two filters in one
- Multiple configurations
- Easy installation

#### Superior Reduction of EMI from Power Supplies and Lighting

DCNG5003 provides EMI suppression where you need it—across the wide spectrum starting at 10kHz. Common filters start their attenuation only above 100kHz

#### Two EMI DC Filters in One

DCNG5003 is two independent filters in one allowing use of just one filter for multiple DC supplied, saving space and cost. When connected in parallel, DCNG5003 provides double of current capacity—up to 6A.

#### Multiple Configurations, One Filter

You can use DCNG5003 in several configurations: two separate filters; one combined filter doubled in current capacity; serial connection of these two filters to boost attenuation at the very low frequencies; or in differential mode providing filtering in both positive and negative supply branch.

#### Fully Symmetrical Performance

DCNG5003 is completely symmetrical eliminating possibility of connection errors. It provides equal attenuation in both directions, not only reducing EMI from DC supply, but also blocking EMI generated by a noisy load from polluting DC supply for the rest of equipment

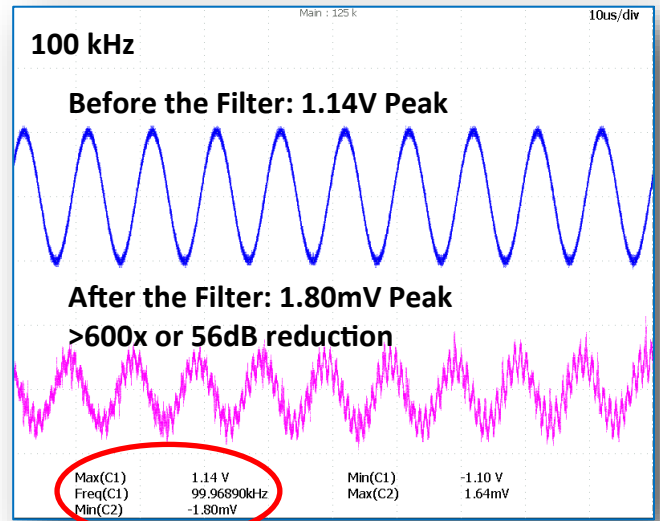
DC EMI Filter  
DCNG5003  
3A/6A 50VDC

## Specification

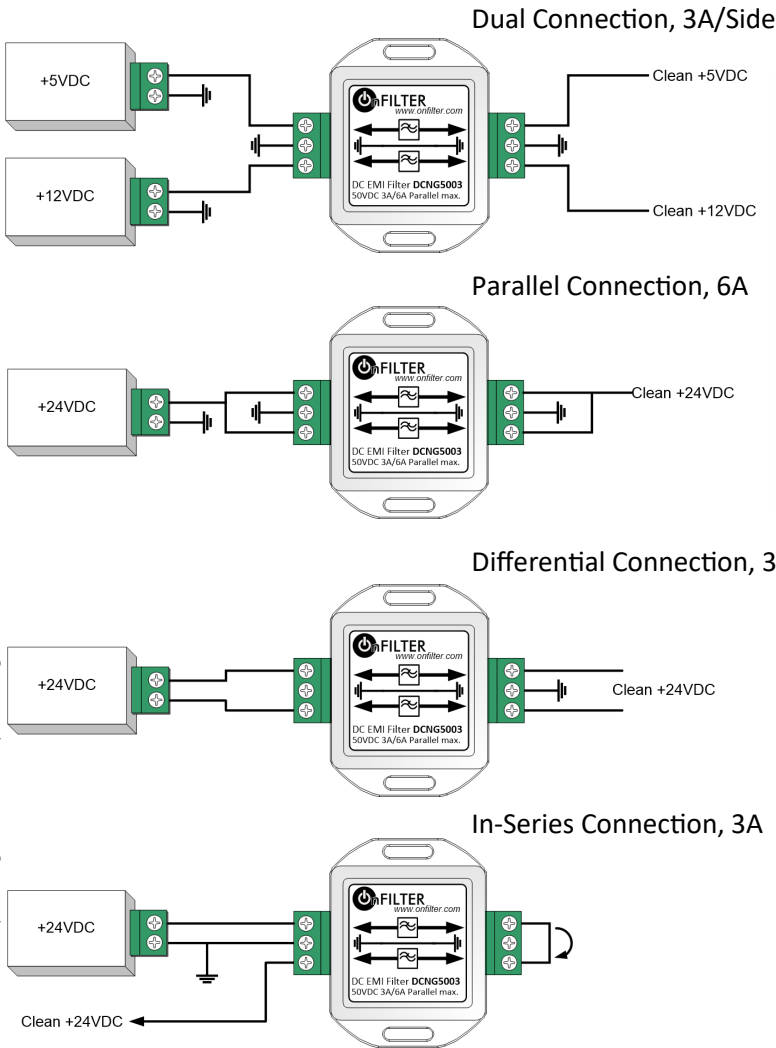
OnFILTER DC filter DCNG5003 provides substantial reduction in noise from switched mode power supplies and from "noisy" loads protecting proper operation of sensitive electronics.

Parameter	TF20101
<b>DRIVE FILTER</b>	
DC Voltage, max.	50VDC
Current, max.	
Single connection	3A
Parallel connection	6A
Nominal DC Resistance	<0.1Ω

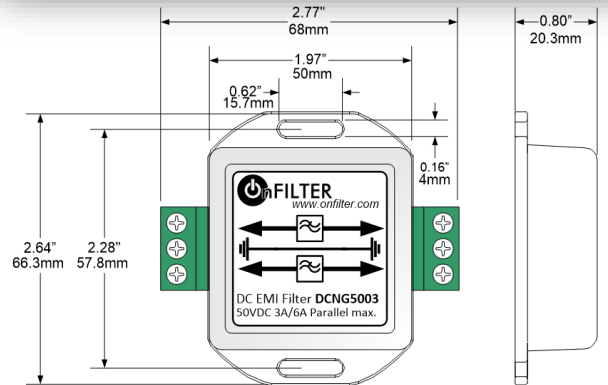
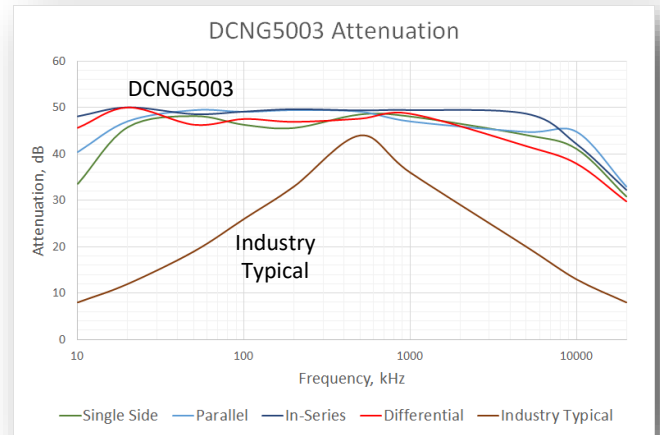
## Typical Time-Domain Data



## Typical Connections



## Typical Frequency Domain Data



**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](http://www.onfilter.com)  
[info@onfilter.com](mailto:info@onfilter.com)

## Ordering Information

**DC EMI Filter Model: DCNG5003**

