EM 500 | Universal Wideband Mains Filters

Universal line filters for fast and external retrofitting of devices (1 – 16 A)

High frequency voltages of motors, switches, oscillators, switching power supplies and more couple in line networks which can influence negatively the function of electrical devices.

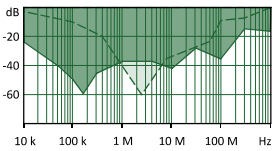
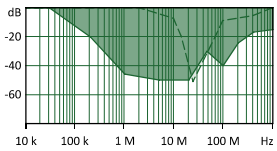
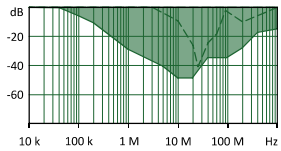
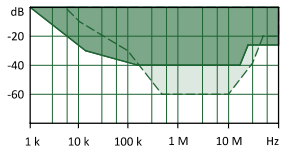
Electrostatic discharges, lightning and switching operations produce dangerous surges by increasing the risk of destruction. Overvoltage pulses also cause broad RF spectra of interferences.

The EM 500 series combines wideband filter and surge arrestor circuits to protect valuable equipment against malfunctions and damages. A compact EM 500 suppresses efficiently line interferences and surge pulses and operates bidirectional.

The EMD(Z) 503 causes a high symmetrical and asymmetrical attenuation in the low frequency range (e.g. CENELEC A-D) and helps to reduce interferences by/due to Smart Metering, DLAN/PLC, touch lamps, switching power supplies, LED drivers…

More protection against failure and costs

- ☑ For office, laboratory, IT, industrial use...
- ☑ For sensitive and valuable consumer electronics
- ☑ Cost-effective retrofitting
- ☑ Easy plug-in
- ☑ Optional surge protection
- ☑ Ground wire choke
- ☑ Compact housing
- ☑ Modern design

	EM 501	EMZ 501	EM 504	EMZ 504	EM 516	EMZ 516	EMD 503	EMDZ 503
Max Power	1 A (250 W)		4 A (1000 W)		16 A (4000 W)		3 A (750 W)	
Stopband	8 kHz – 200 MHz		70 kHz – 200 MHz		200 kHz – 200 MHz		9 kHz – 100 MHz	
Attenuation	10 – 40 dB						10 – 60 dB	
Rated Voltage	250 V (50 Hz)							
Surge Protection		✓		✓		✓		✓
	D/Type 3, discharging capacity: 4,5 kA (8/20 µs), protection level: < 0,75 kV (P-L), response time: < 25 ns							
Fuse	✓	✓	✓	✓			✓	
	5x20 slow blow (IEC127-2/V) depending on max power consumption							
Connectors	CEE 7/4							
Temperature Range	max. -25° ... +40° C							
Climate Category	25/80/75 (IEC), HQF (DIN40040)							
Dimensions	43 x 55 x 116 mm							
Weight	ca. 150 g							
Frequency Response typical 50 Ω asym sym								

Installation

No accumulation! Use short and single connection! Power cables can be like antennas. Cables must be as short as possible to reduce the coupling of electro-magnetic fields. No multiple plug socket (interaction)! We recommend one mains filter per device.

In the case of interference due to communication devices (e.g. DLAN/PLC) the filter EMD(Z) 503 must be only used on the side of the malfunctioning device.

Surge Protection

The types EMZ 501/504/516 and EMDZ 503 include a function control. Replace the mains filter if the red indicator lamp bourns out!

QUALITY MADE IN GERMANY

Product Selection

The lower the maximum current load, the larger is the range. The current consumption of the connected device should be slightly smaller than the maximum current load of the mains filter. Before installation the product information of the device must be checked to select the suitable type.