



# FIL-01

## ULTRALOW NOISE VOLTAGE AMPLIFIER



The FIL-01 is an electronic high-pass filter and amplifier module developed to offer the best performances in terms of voltage noise characterization. FIL-01 acts as an AC coupling filter by removing the DC component of the input signal with a cut-off frequency of 600 mHz. The output signal is also amplified by a factor of 2000 (66 dB amplification) with a 3MHz bandwidth and an input voltage noise of 0.6 nV/ $\sqrt{\text{Hz}}$ .

## SPECIFICATIONS

- Number of inputs: 1
- Number of outputs: 1
- Input/Output connectors: SMA female
- Input AC voltage saturation amplitude:  $\pm 2.25$  mV
- Input voltage range max (AC+DC):  $\pm 15$  V -
- Output voltage range max:  $\pm 4.5$  V
- Amplifier gain: 2000 (66 dB)
- High-pass filter cut-off frequency: 600 mHz
- Bandwidth: 3 MHz
- Power supply input plug: P1J
- Provided power supply: Triad Magnetics WSX060-4000
- Product dimensions: 125 mm x 80 mm x 35 mm
- Product weight: approx. 400 g
- Aluminum case
- Temperature: 0°C to +40°C

## PERFORMANCES

Typical voltage noise power spectral density:

