

CDG CMP-46

Current monitoring probe

- 10 kHz – 400 MHz
- Insertion impedance < 2,5 Ω
- Cable diameters up to 46 mm



Current Monitoring probes may be used for RF current measurements with the advantage that there is no loading of the circuit, thus allowing normal operation of the DUT while the measurement is done. The CDG CMP-46 measures RF common mode currents (asymmetrical currents) of single conductors or bundles of conductors (the sum of currents considering the sign is of importance).

The current measurements are made by placing the current carrying conductor inside the central opening of the probe and measuring the output voltage by means of an RF voltmeter, which can be converted to the equivalent current value.

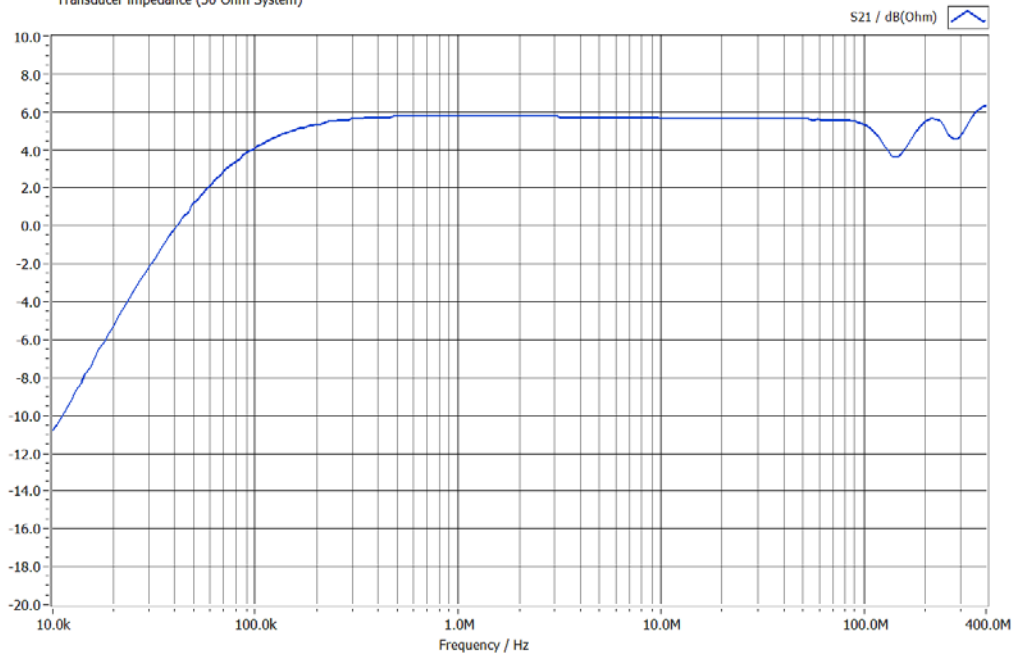
The CMP-46 can be used as current monitor for BCI testing (ISO 11452-4, MIL-STD 461, DO-160 and others as well as acc. to IEC / EN 61000-4-6 chapter 7.4.

Technical specifications:

Frequency Range:	10 kHz – 400 MHz
Insertion Impedance:	< 2,5 Ω
Max. signal current:	1A
Signal output:	BNC socket
External diameter	115 mm
Internal diameter	46 mm
Thickness	30 mm
Weight	approx. 0,6 kg

Typical transducer impedance

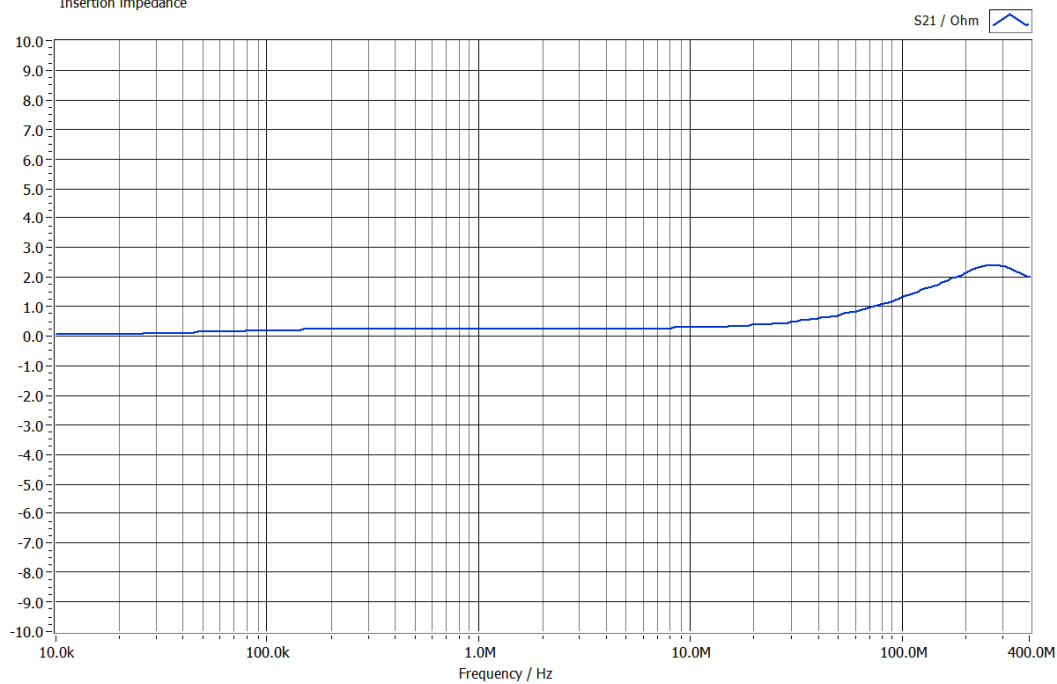
Network Analyser HP8751A (S.-No.: 3315J01756), Test Set 87512A (S.-No. MY43100614)
Current transformer
Transducer impedance (50 Ohm System)



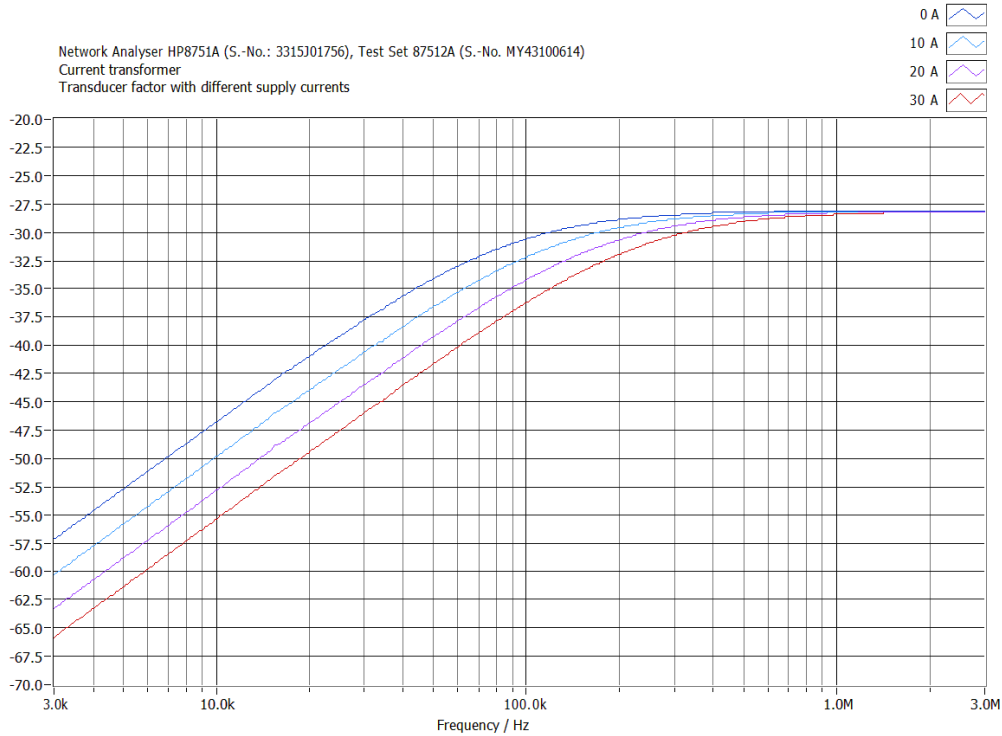
$$\text{Current (dB}\mu\text{A)} = \text{Voltage (dB}\mu\text{V)} / \text{Receiver Impedance (dB}\Omega\text{)}$$

Typical insertion impedance

Network Analyser HP8751A (S.-No.: 3315J01756), Test Set 87512A (S.-No. MY43100614)
Current transformer I
Insertion impedance



Transducer factor with different supply currents
(to estimate the saturation effects at different currents with low frequencies)



Accessories:

CDG A CMP-46

Calibration set for the CDG CMP-46

