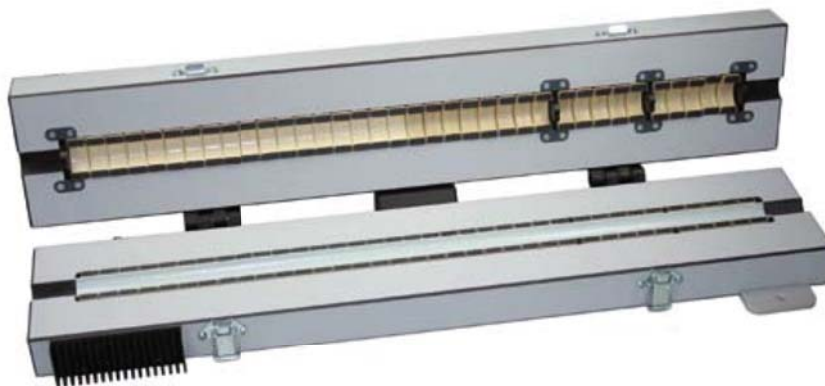


# EM Coupling Clamp – EMCL

for immunity tests acc. to IEC/EN 61000-4-6



## Description

According to IEC/EN 61000-4-6 the preferred coupling and decoupling devices are the CDNs, for reasons of test reproducibility and protection of the AE. However, if they are not suitable or available, clamp injection should be used.

Often, clamp injection needs to be applied to multi-pair balanced cables because suitable CDNs might not be available.

The EM clamp establishes both capacitive and inductive coupling to the cable connected to the EUT.

The EM clamp (in contrast to the conventional current injection clamp) has a directivity  $\geq 10$  dB, above 10 MHz, so that a defined impedance between the common-mode point of the AE and the ground reference plane is no longer required. Above 10 MHz, the behavior of the EM clamp is similar to that of a CDN.

## Features:

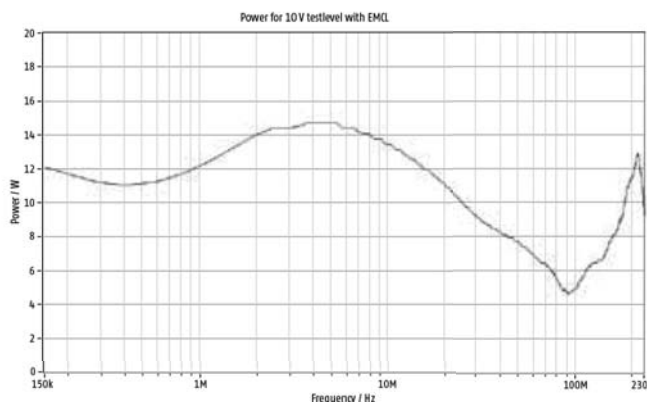
- EM-clamp for immunity testing of cables with up to 20 mm diameter
- High coupling factor: less than 15 watts amplifier output power is required to obtain a test level of 10 V
- Calibration unit and calibration data are supplied with each instrument



Calibration unit of EMCL (included as standard)

## Technical specifications

Frequency range	100 kHz – 1000 MHz
Nominal impedance	50 $\Omega$
Connector	N-type female
Maximum input level	
0.15 – 100 MHz	100 W, 15 min.
100 – 230 MHz	100 W, 5 min.
230 – 1000 MHz	50 W, 3 min.
Cable diameter	< 20 mm
Weight	7 kg
Dimension (L x W x D)	655 x 120 x 80 mm



Measured amplifier output power to obtain a test level of 10 V. 6 dB attenuator and 80 % amplitude modulation depth are taken into account.