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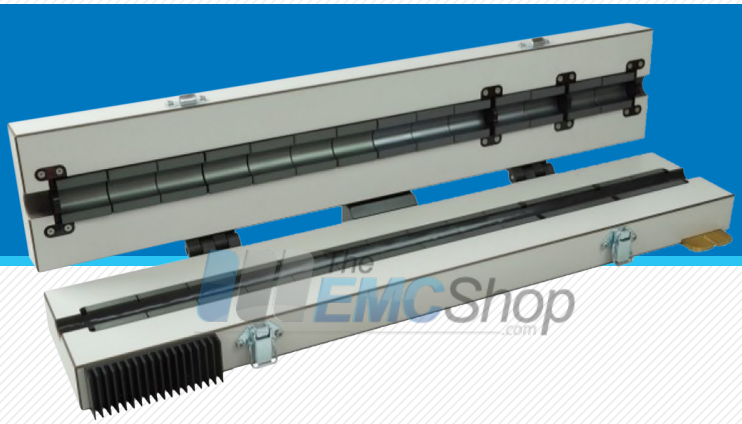
ACCREDITED
Calibration Laboratory
Cert. 5518.01

MODEL NUMBER:
EMIC-20
EM-COUPLING CLAMP



IEC / EN 61000-4-6

- **For the coupling during immunity tests according to IEC/EN 61000-4-6**
- **Frequency range 10 kHz - 1 GHz**
- **Suitable for cables up to 20 mm, for thicker cables up to 35 mm: use CDN EMCL-35**

High Test voltage:
Up to 30V in combination with 75 W generator

OVERVIEW

EM coupling clamps are always used when the use of coupling / decoupling networks (CDN) does not seem suitable or appropriate. This applies, for example, to unshielded cables consisting of a large number of individual conductors. With the electromagnetic coupling path, both capacitive and inductive coupling into the cable connected to the test object is achieved.

The EM coupling clamp has a directivity of ≥ 10 dB above 10 MHz, so that a defined impedance between the asymmetrical connection point of the auxiliary / additional equipment and the reference ground plane is no longer required. Above 10 MHz, the behavior of the EM coupling link is therefore similar to that of coupling/decoupling networks.

KEY FACTS

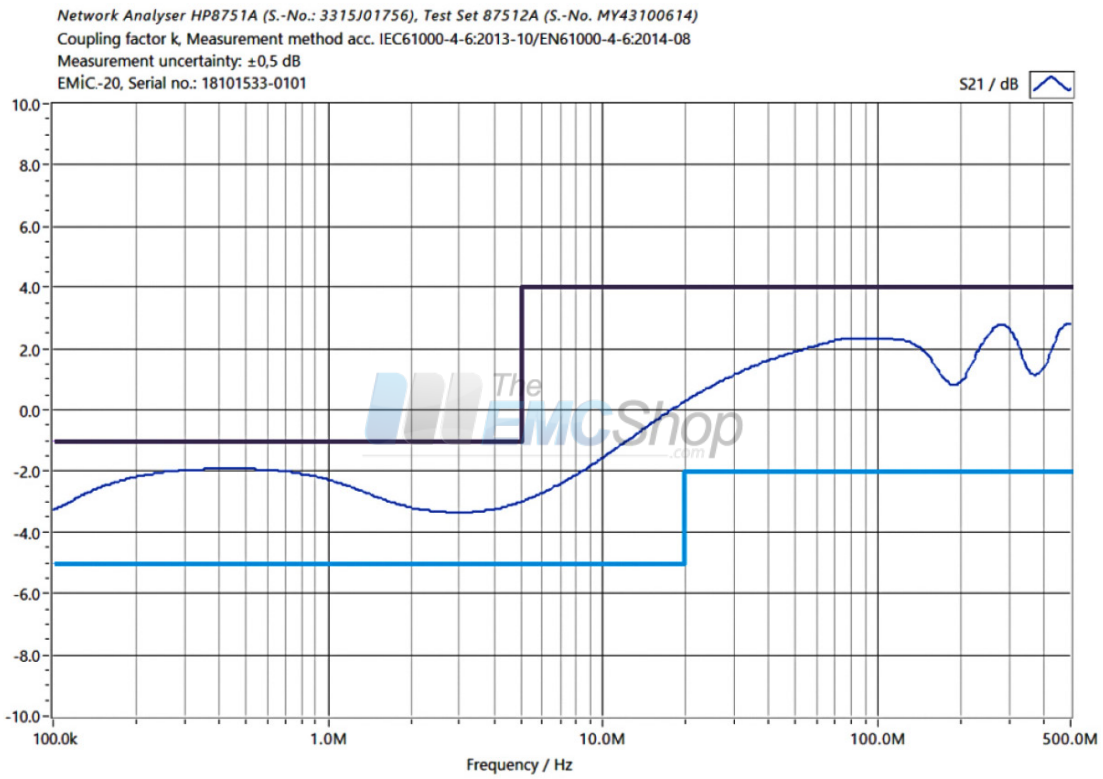
- EM coupling clamp for immunity tests on cables up to 20 mm diameter
- Low insertion loss: less than 15 W amplifier power is required to achieve the test level of 10 V
- Supplied as standard **with calibration set and individual calibration data!**

TECHNICAL DATA I

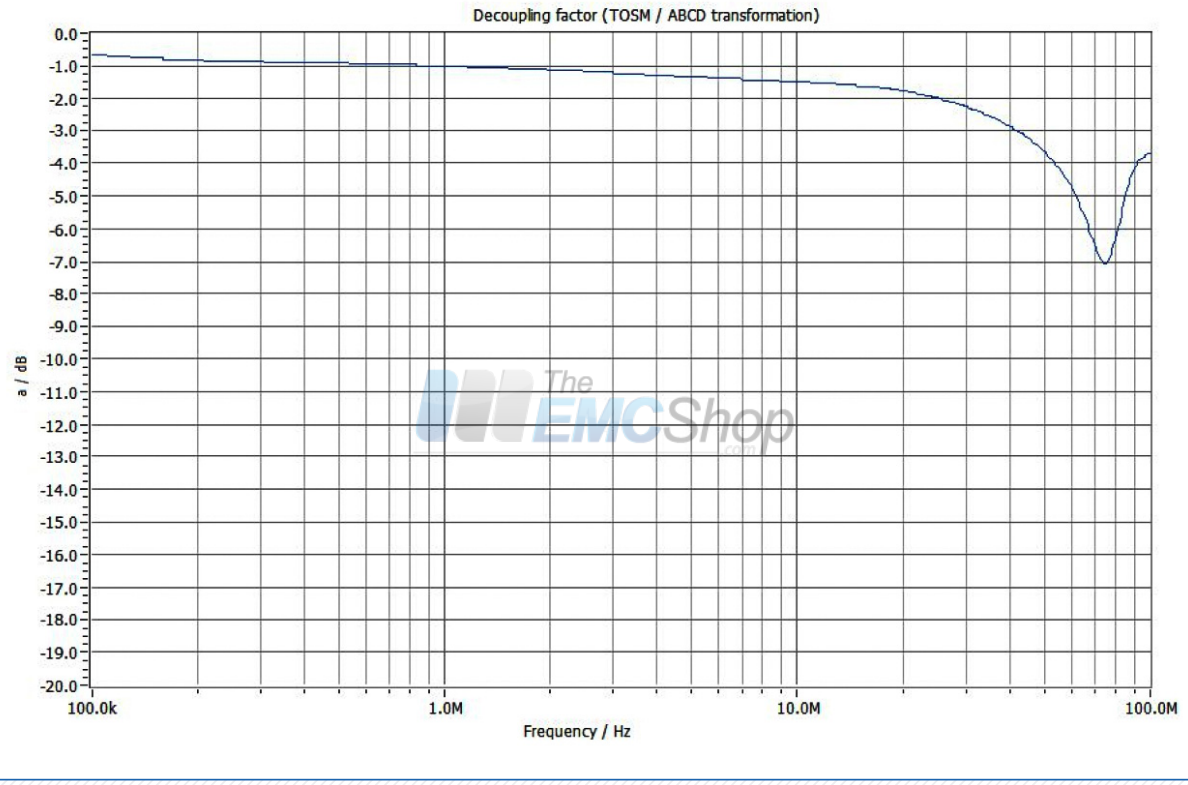
Frequency range	10 kHz – 1 GHz
Nominal impedance	50 Ohm
Max. input level 0,15 – 100 MHz 100 – 230 MHz 230 – 1000 MHz	 100 W, 15 min 100 W, 5 min 50 W, 3 min
Connector	N-type female
Cable diameter max.	< 20 mm
Dimensions (L x W x H)	632 x 120 x 80 mm
Weight	approx. 7 kg

TECHNICAL DATA II

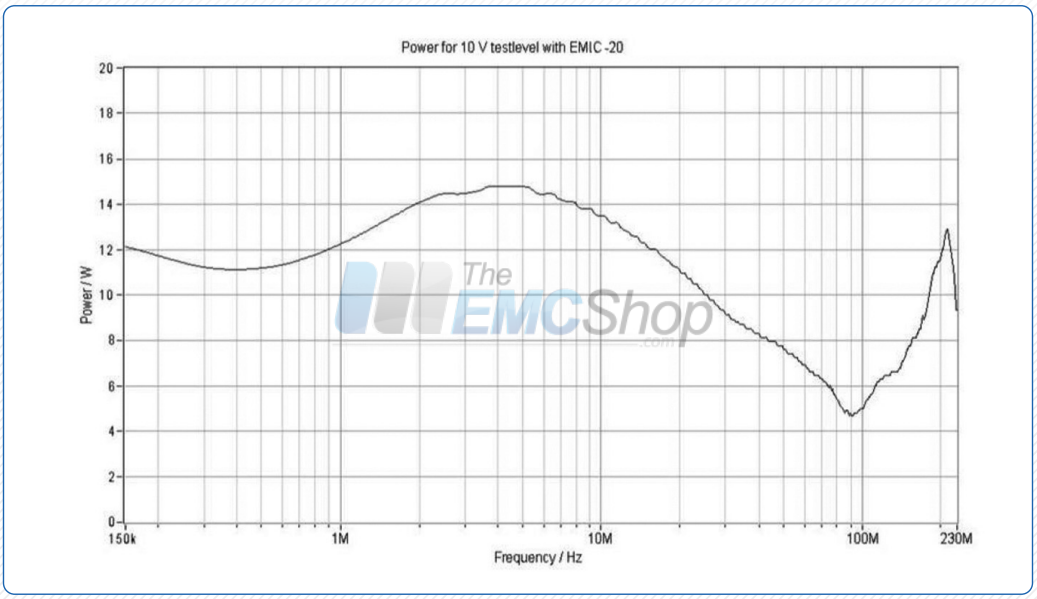
Typical coupling factor



TYPICAL DECOUPLING FACTOR (TRANSFORMED)

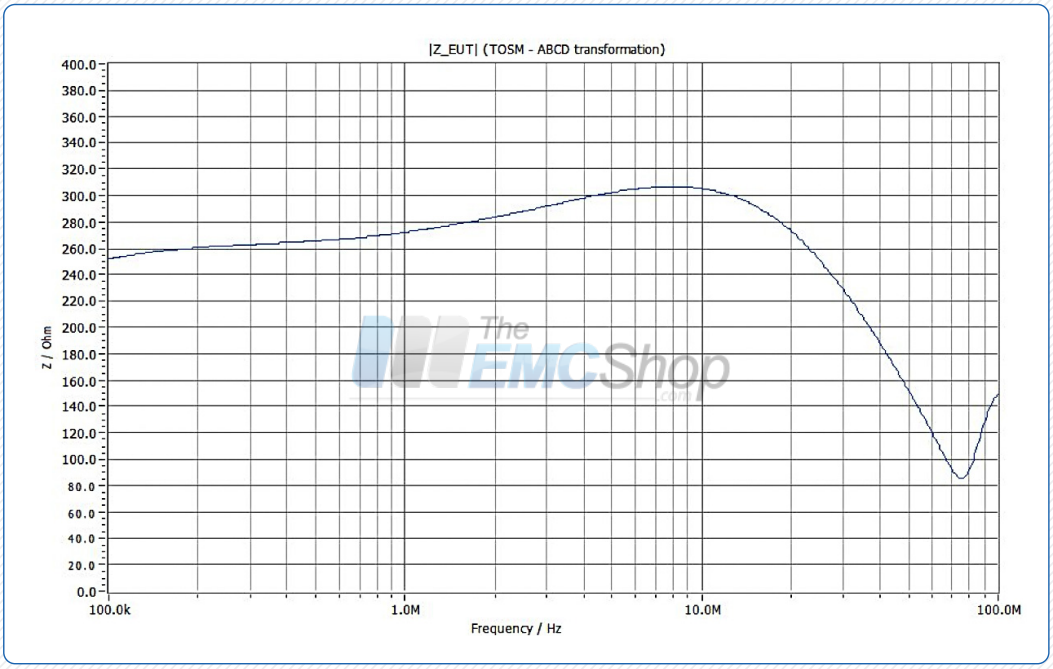


MEASURED AMPLIFIER POWER



Measured amplifier power to achieve the highest level required in EN 61000-4-6 of 10 V. Measurement was carried out with 6 dB attenuator and 80% amplitude modulation.

TYPICAL CLAMP IMPEDANCE (TRANSFORMED)



CALIBRATION SET / CALIBRATION DATA (INCLUDED IN DELIVERY)

- 2 mounting brackets incl. 50/150 Ohm transition
- 1 piece BNC termination, 50 Ohm, 1 W
- 1 adapter with banana plugs for calibration of the network analyzer, length 34 mm
- 1 piece brass rod 4 mm with banana plugs for setting the test level, length 672 mm
- N male to BNC female