| | || SCHaffner

KEMZ 801

Immunity Injection Clamp

- As specified in IEC 61000-4-6
- Can be used on almost any cable
- Low insertion loss

The KEMZ 801 can be used for testing immunity by inducing currents into the cables of a test device. It is particularly useful for testing IT or telecomms equipment as recommended in CISPR Pub. 20 (EN55020). This clamp has similar properties to a CISPR recommended 150 Ω coupling unit. It can be powered from an RF generator of 100 Watts 0.15 - 230MHz, 50 Watts 230MHz - 1GHz. Alternatively, a burst generator can also be used with a charging voltage of up to 4kV.

IEC 61000-4-6 (EN 61000-4-6) defines three basic types of transducer used for the injection of test signals into the equipment under test (EUT). The basic requirement is to introduce a known level of RF signal onto the cable of the EUT at each test frequency and to determine whether the EUT continues to function correctly. In order to do this, it is necessary to decouple the auxillary equipment (AE) from the test signal. If this is not achieved it is difficult to know whether any fault is due to a failure of the EUT or the AE.

Whilst the coupling/decoupling network (CDN) is one of the best ways to achieve this test and indeed it is mandatory to use them under some circumstances, it is not always possible to use a CDN.

If the levels of the wanted current or voltage are too high or if high data rate signals are to be transmitted it may not be possible to realise a suitable CDN. This is particularly true in connection with IT or telecommunications equipment as its use is advised in CISPR 20 (EN 55020).

In these circumstances, the KEMZ 801 injection clamp is ideal. Built to designs first produced by the Swiss PTT, the KEMZ 801

injects signal through a combination of inductive and capacitive coupling whilst decoupling the AE to values in excess of 10dB. The use of a ferrite core along the length of the clamp also ensures that the common mode impedance remains within the limits required by the standard. Supplied with optional calibration components, the KEMZ 801 is rugged, reliable and simple to use. Designed to accept input power up to 100 watts (150kHz to 230MHz) and 50 watts (230MHz to 1GHz), the KEM Z801 can introduce test levels in excess of 100 volts.

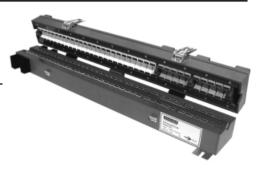
An additional benefit of the KEMZ 801 is that it can be used for the fast burst test defined in IEC 61000-4-4 5ns/50ns at levels up to 4kV.

Power (Watts)

100

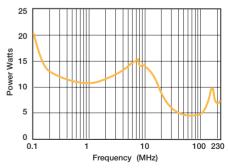
100

50



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UKAS Calibration option

Technical Specifications	KEMZ 801
Frequency range	150kHz - 1GHz
Maximum cable diameter	20mm
External dimensions	645 x 100 x 110mm
Net weight	7kg

Time (minutes)

15

5

3

Maximum input level Frequency (MHz)

0.15 - 100

100 - 230

230 - 1000