Clamp-on Current injection clamps for BCI tests

These probes are designed to inject RF current on cables up to 38mm diameter. The clampon feature makes them easy and quick to use. Ideal for EMC compliance tests as specified in ISO and IEC standards.

A current clamp is used as an injection device for the testing RF conducted immunity characteristics of products according to IEC61000-4-6. They can be used for single conductors or cable bundles.

Direct connection to the conductor under test is not necessary, since the probe may be opened for insertion of the conductor into the window of the toroid and then closed again to form a toroidal transformer with the conductor acting as a one-turn primary.

Each probe is calibrated for insertion loss and transfer impedance in a test fixture designed for the particular window size. This fixture provides a signal path with a low Voltage Standing Wave Ratio (VSWR). A typical fixture **is** the RF9125, used for probes with 32 to 44 mm diameter windows.

Specifications @ 25°C

| <u>Model</u> | | 9217 | 9142 |
|----------------------|---|---|---|
| <u>Electrical</u> | | | |
| Bore size | | 38mm | 38mm |
| Frequency range | | 10KHz – 100MHz | 5MHz – 430MHz |
| Rated Watts | | 100 | 200 |
| Insertion loss | Under 6dB Under 10dB Under 15dB Under 20dB | 200KHz – 5MHz 80KHz - 100MHz 50KHz – 100MHz | 10MHz – 350MHz 5MHz – 430MHz 2.5MHz – 500MHz 1.5MHz – 500MHz |
| <u>Mechanical</u> | ' | ' | |
| Dimensions | | RF9123 & RF9217 clamp-on current probe | 115 x 73 x 38mm (excluding connector) |
| RF Connectors | | | Type-N |
| Environmental | | | |
| Temperature | | | 0° C to +50° C |
| Operating Humidity | | | 95% Non-condensing |



Laplace Instruments Ltd

Tudor House, Grammar School Road, North Walsham, Norfolk NR28 9JH

T: +44 (0) 16 92 40 20 70. E: tech@laplace.co.uk W: www.laplace.co.uk