PCI - Short Pulse Inductive coupler

The inductive coupling device is used for the conducted susceptibility testing according to MIL-STD-188-125 with Montena PCI short pulse generator EMP300K-5-500. The coupler is used for a common mode injection on a bundle of signal or power lines. The coupler can be directly connected to the output of the pulse generator.



SPECIFICATIONS

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Туре	IC3B
Standard	MIL-STD-188-125-1 and -2 / Short pulse current injection
Frequency range	500 kHz - 30 MHz (+0 / -10 dB)
Peak current (short circuit)	≥ 5 kA (typ. pulse rise time: 5 ns, duration: 500 ns)
Peak voltage (1/500 ns)	Up to 100 kV (to earth)
Primary inductance	5.2 µH
Max diameter of cable under test	63 mm
Connector	M6 ring terminals
Dimensions (L x W x H)	77 x 21 x 25 cm
Weight	55 kg

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Common mode verification setup

The pulse generator delivers the high current pulse into the cable under test in common mode through the inductive coupler.

A current sensor measures the injected current pulse before the protecting devices and another probe measures the residual current behind the protecting devices.

In order to ensure a correct measurement, the current probes are connected with fiber optic links and the measurement equipment is installed in a shielded enclosure.



Ordering information

TYPE	DESCRIPTION
IC3B	MIL-STD-188-125, Short pulse (E1) inductive coupler, frequency range: 500 kHz - 30 MHz, max. current: 5 kA, max. voltage: 100 kV