

Capacitive Coupling Clamp

CDN 500

- Coupling clamp for automotive electronics
- Conforms to ISO 7637/3
- Pulse injection on signal and control lines

The coupling clamp CDN 500 conforms exactly to the requirements of ISO 7637/3 and other standards, guaranteeing that tests are carried out in strict compliance with the standards.

The CDN allows the fast nanosecond pulse bursts (ISO 3a and 3b) to be injected on cable runs. Very high impedance signal lines are also to be found in vehicles on which the disruptive effects of ISO pulses 1 and 2 can also show up through capacitive coupling.

The characteristic impedance of the unit is 50Ω . The CDN 500 coupling clamp is fitted with appropriate BNC connectors at both sides and is connected to the generator via a coaxial cable. The far side of the clamp has to be terminated with a 50Ω load resistor. A suitable terminating load is available as an accessory under the type number INA 5030 which also provides a measurement output via a 40dB attenuator.

The coupling clamp will accept ribbon cables as well as round cables of up to 40mm diameter. The effective coupling capacitance depends on the cross section and the material of the cable used; a typical value being around 100pF.



Technical Specifications		CDN 500
Typical coupling capacitance		100pF approx. (200pF max.)
Active length		1000mm (39")
Diameter of round cables		40mm (1.6") max.
Breakdown voltage		>500V
Characteristic impedance (without cable inserted)		$50\Omega \pm 10\%$
Connectors		50Ω BNC (1 each side)
Dimensions L x W x H mm		1300 x 300 x 106 (51.2 x 11.8 x 4.2")
Weight		11.5kg (25lbs) approx.
Construction	Brass, with plated surface; coupling panel with roller hinges for precise positioning	