

Features

Frequency range: 150 MHz to 230 MHz

Meets CISPR 16-1-2 requirements

Up to 50 Amps AC current handling

Individual calibration

Three Year Warranty



Description

Com-Power CDN-M450E is a part of the series of Coupling/Decoupling Networks designed specifically for testing product for conducted immunity per IEC/EN 61000-4-6.

The CDN-M450E is designed for testing products that uses four conductor power cable. It has five 4 mm shrouded banana socket for both EUT and AE power connections. The CDN-M450E can handle up to 50 Amps AC and 35 Amps DC of current.

The RF disturbance signal coupling port is female BNC. It can handle up to 40V of RF input Voltage. The bottom surface of the CDN is not painted for easy and effective grounding.

All Com-Power CDNs are individually calibrated. The Com-Power CDN-M450E fully complies with the requirement contained in the IEC 61000-4-6 and CISPR 16-1-2.

All Com-Power CDNs can be purchased separately or as part of the CIS series conducted immunity test system. This is a pre-packaged solution that includes an ACS series power amplifier and all accessories required for the test.

Application

During conducted Immunity testing, CDNs are utilized to provide a means of coupling RF common mode signals to the power supply lines. In addition, CDNs provide required common mode impedance between the power supply lines and ground, minimize interference to the auxillary equipment signals and provide uninterrupted path for the power to the EUT.

Before you begin testing with the CDN-M450E you will need to establish calibrated drive levels corresponding to your desired test levels. During drive level calibration, the RF signal level being injected to the CDN is adjusted incrementally until the voltage level measured at the 150Ω to 50Ω adapter (ADA-515-2) connected to the EUT port is approximately equal to the Umr value given in the table below. The ADA-515-2 and accessories needed for this test are available from Com-Power.

Test Levels Open Circuit Voltage	Umr
1	0.167
3	0.5
10	1.67

Umr= Voltage level measured at the output of the 150Ω to 50Ω adapter (ADA-515-2)

Specifications

Product Name	Coupling Decoupling Network (CDN)
Compliant Test Standards	IEC -61000-4-6, CISPR 16-1-2
Application	Four conductor power cable
Frequency Range	150 kHz to 230 MHz
RF Input Voltage	40V (Max)
RF Input Connector	50Ω BNC (Female)
Voltage Rating	250 VAC / 350 VDC (Line to Ground)
Current Rating	50 Amps AC / 35 Amps DC (Max)
AE and EUT Connections	5.2 mm shrouded banana sockets
Common Mode Impedance	150 kHz - 24 MHz: 150Ω ± 20Ω 24 MHz - 80 MHz: 150Ω + 60Ω / - 45Ω 80 MHz - 230 MHz: 150Ω + 60Ω / - 60Ω
Voltage Division Factor	9.5 dB +3 / -0.5
Decoupling of Common Mode Disturbance	≥ 40 dB (EUT/AE)
Dimensions	7 x 7 x 16 ¾ inches 17.7 x 17.7 x 42.5 cm
Weight	8 lbs. / 3.6 kg
Accessories Available from Com-Power for setting test levels and running the test	ADA-M450E Shorting adapters ADA-515-2 150Ω to 50Ω adapters TEP-050 50Ω Terminator 1, 3, 6, 10, 20, 30 dB Power Attenuators DCD-1000-100W Directional Coupler ACS series Power Amplifiers



Shorting Adapter Set ADA-M450E



ADA-515-2 Adapter Set



TEP-050 Terminator

All values are typical values unless otherwise specified.
Specifications are subject to change without notice.

Typical data

