

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-M250E is part of a series of Coupling/Decoupling Networks designed specifically for testing product for conducted immunity per IEC 61000-4-6.

The CDN-M250E series is used for testing products with two wire power supply lines. It can handle up to 50 Amps (AC) or 35 Amps DC power source. It has 5.2 mm shrouded banana socket for both EUT and AE power connection.

The RF disturbance signal is injected using a BNC-connector which can handle up to 40 V of input. The bottom surface of the CDN is not painted, so that it be properly grounded during the test.

All Com-Power CDNs can be purchased separately or part of the CIS series conducted immunity test system. The test system includes the ACS series power amplifier and accessories required to conduct the immunity testing.

All Com-Power CDNs are individually calibrated. The Com-Power CDN-M250E fully complies with the requirement contained in the IEC 61000-4-6 and CISPR 16-1-2.

Application

During conducted Immunity testing, CDNs are utilized to provide a means of coupling RF common mode signals to each line. In addition, CDNs provide the required common mode impedance to the EUT, isolation to the auxiliary equipment via common mode decoupling of the disturbance signals and provide uninterrupted communication between the EUT and auxiliary equipment.

Before you begin testing with the CDN-M250E 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 U_{mr} 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	Open Circuit Voltage @ U_{mr}
1	0.167
3	0.5
10	1.67

U_{mr} = 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
Frequency Range	150 kHz to 230 MHz
I/O rating for EUT/AE Ports	250 VAC, 350 VDC
Max Input Voltage	40 V
Application	Two wire power cables
Current rating	50 Amps (AC), 35 Amps (DC)
RF Input Connector	50 Ω BNC (female)
I/O Connection	5.2 mm banana socket with shrouded Sheath
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 / -1 dB
Dimensions	7 x 7 x 16 ¾ inches 17.7 x 17.7 x 42.5 cm
Weight	7 lbs. / 3.1 kg
Accessories Available from Com-Power for setting test levels and running the test	ADA-M250E shorting adapters ADA-515-2 150 Ω to 50 Ω adapter TEP-050 50 Ω Terminator 1, 3, 6, 10, 20, 30 dB Power Attenuators DCD-1000-100W Directional Coupler ASC series Power Amplifiers



Shorting Adapter Set ADA-M250E



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

