

#### Coupling Decoupling Network CDN-M350E

### 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-M350E is part of a series of Coupling/Decoupling Networks designed specifically for testing product for conducted immunity per IEC 61000-4-6.

The CDN-M350E series is for used for testing products with three wire power supply lines (L +N + PE). It can handle up to 50 A (AC) or 35 A 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 BNCconnector 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 seperately or part of the CIS series conducted immunity test system. The test system includes the ACS series poweramplifier and accessories required to conduct the immunity testing.

All Com-Power CDNs are individually calibrated. The Com-Power CDN-M350E 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 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 via common mode decoupling of the disturbing signals and provide uninterrupted path for the power to the EUT.

Before you begin testing with the CDN-M350E 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 150 $\Omega$  to 50 $\Omega$ 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	Open Circuit Voltage @ Umr
1	0.167
3	0.5
10	1.67

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



#### Coupling Decoupling Network CDN-M350E

# 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	Three wire power cables
Current rating	50 Amps (AC), 35 Amps (DC)
RF Input Connector	<b>50 Ω BNC</b> (female)
I/O Connection	5.2 mm banana sockets 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 +4.5 / -0.5 dB
Dimensions	7 x 7 x 16 ¾ inches 17.7 x 17.7 x 42.5 cm
Weight	7.5 lbs / 3.4 kg
Accessories Available from Com-Power for setting test levels and running the test	ADA-M350E shorting adapters ADA-515-2 150 Ω to 50 Ω adapters 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-M350E

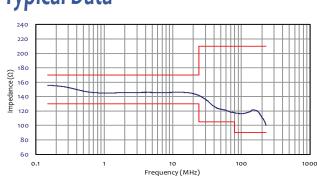


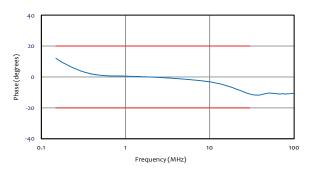
#### ADA-515-2 Adapter Set



**TEP-050 Terminator** 

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





# **Typical Data**