

Features

- Test From 150 MHz to 230 MHz**
- Designed for IEC / EN 61000-4-6**
- For 8 wire unscreened cables**
- Individual Calibration Included**
- Three Year Warranty**



Description

Com-Power CDN-AF8E is part of a series of Coupling/Decoupling Networks designed specifically for testing product for conducted immunity per IEC / EN 61000-4-6.

The CDN-AF8E series is for used for testing products uses eight wire unscreened cables for data communication. It has four 2 mm shrouded banana sockets for both EUT and AE power connection. The CDN-AF4E can handle up to 5 A of current.

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 for safety as required by the test standard.

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

All Com-Power CDNs are individually calibrated. The Com-Power CDN-AF8E 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 required common mode impedance between each line and ground, minimize interference to the auxiliary equipment via common mode decoupling of the disturbing signals and provide uninterrupted communication between the EUT and Auxillary equipment.

Before you begin testing with the CDN-AF8E you will need to establish a 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) connected to the EUT port is approximately equal to the Umr value given in table below. The ADA-515 and ccessories that are needed for this test is also 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 150Ω to 50Ω adapter (ADA-515)

Specifications

Product Name	Coupling Decoupling Network (CDN)
Applicable Test Standards	IEC / EN 61000-4-6
Frequency Range	150 kHz to 230 MHz
I/O rating for EUT/AE Ports	5 Amps
Max Input Voltage	40 V
Voltage Rating	311 V AC Line to Ground 440 V DC Line to Ground
Application	8 wire unshielded Unbalanced cables
RF Input Connector	50 Ω BNC (female)
I/O Connection	2 mm shrouded banana sockets
Common mode impedance	550 kHz - 26 MHz: 150Ω ± 20Ω 26 MHz - 80 MHz: 150Ω + 60Ω / - 45Ω 80 MHz - 230 MHz: 150Ω + 60Ω / - 60Ω
Voltage Division Factor	9.5 dB +4 / -1 dB
Dimensions	6 x 6 x 13 inches 15.2 x 15.2 x 33 cm
Weight	5 lbs. 2.3 kg
Accessories Available from Com-Power for setting test levels and running the test	ADA-AF8E shorting adapters ADA-515-2 150 Ω to 50 Ω adapters TEP-050 50 Ω Terminator ATTN-6-100W Power Attenuator DCU-300-100W Directional Coupler ASC series Power Amplifiers



Shorting Adapter Set ADA-AF8E



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

