CI00250A

- M1–M12
- RF Conducted Immunity System
- 75 Watts
- 10kHz–250MHz

Features

Complete Testing Solutions to the following standards (Option 1 required):

- IEC 61000-4-6:2013
- IEC 60601-1-2:2014
- EN 61000-6-1:2007
- EN 61000-6-2:2005
- EN 55024:2010

The Model CI00250A is a fully self-contained state of the art system designed to test RF Conducted Immunity. The CI00250A contains all the instruments needed to perform conducted immunity testing to the IEC 61000-4-6 specification. The system contains a signal generator, 3 channel power meter, 75W minimum AR amplifier 10kHz to 250MHz, and emcware® control software. Everything is contained in a single housing, which eliminates setup issues. This system will have the versatility needed for every test laboratory and equipment manufacturer. The RF amplifier and the signal generator can be used independently of the system. If special needs arise or standards were to change a larger amplifier can be connected to the system. The use of spectrum analyzers and monitoring equipment may also be controlled by the software. Due to changes to previously mentioned standards, Option 1 is now required to comply with amplifier linearity testing.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

Internal Test Specifications*	
IEC/EN 60601-1-2 IEC/EN 50130-4 IEC/EN 61326 IEC/EN 61000-6-1 IEC/EN 61000-6-2 CISPR 24/EN 55024	IEC 61000-4-6 procedure and levels IEC 61496-1 **Note that Option 1 is required to satisfy these test specifications.*

**Specifications can be met using AR-specified external accessories (injection probes, monitor probes, cal fixtures, CDN's, attenuators, etc.) Contact AR for further information.*

Signal Generator Specifications		
	SG1200	SG6000 (optional)
Frequency range resolution	9 kHz to 1.2 GHz, 1Hz	100kHz to 6 GHz, 0.01 Hz
Power range resolution	-140 to +13 dBm, 0.1dB	-110 to +7 dBm, 0.02 dB
Modulation	AM, FSK, FM, Phase, External Pulse	AM, FM, Phase, Internal/External Pulse

Power Meter Specifications	
Channels	3
Power heads	1
Type	diode
Frequency	10kHz to 8GHz
Range	-60 to +20 dBm

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Specifications

RF Amplifier Specifications	
Frequency range	10 kHz to 250 MHz
Power rating	75Watts Minimum
1dB compression	50 Watts Minimum
Harmonic Distortion	-20dBc at 50 Watts
Mismatch tolerance	100% of rated power without fold back. Will operate without damage or oscillation with any magnitude of source and load impedance.
Gain	49dB minimum

General	
Power	115/230 VAC, 50/60 Hz, single phase 16A
Breaker	2 pole, 20A
Cooling	active cooling, air ventilation
Environmental conditions	10°C - 40°C
Dimensions,	50.3 x 42.2 x 52.1 cm 19.8 x 16.6 x 21.7 in
Weight	20.5 kg (45.0 lb)

Control Interface	
GPIB Adaptor	USB to GPIB adaptor included (NI-GPIB-USB-HS)

Connections	
RF Out	Type N Male (front)
Monitor Port In	Type N Male (front)
Signal Generator Out	Type N Male (rear)
Amplifier In	Type N Male (rear)
Pulse In	BNC Male (rear)
Communication	GPIB (IEEE 488) (rear)
Directional Coupler Fwd Out (with Option 1)	Type SMA (rear)
Directional Coupler Fwd In (with Option 1)	Type SMA (rear)
Directional Coupler Rev Out (with Option 2)	Type SMA (rear)
Directional Coupler Rev In (with Option 2)	Type SMA (rear)
Monitor Port Out	Type SMA (rear)
Monitor Port In	Type SMA (rear)
Power Meter Calibration Port Out	Type SMA (rear)

Control Software	
emcware® Software Suite	
PC Requirements	
Computer	Intel Pentium 4, AMD Athlon 64 or better processor
Operating system	Windows 7, Windows 8, Windows 10
RAM	2 GB Minimum
Screen Resolution	1024 x 768
Ports	2 available USB 2.0 ports

Options	
1	Directional coupler and additional power head to level on and monitor forward power
2	Additional power head to add the ability to monitor reverse power
3	Data acquisition card
4	Laptop PC with software preinstalled
5	100 kHz to 6 GHz Signal Generator SG6000 (Replaces standard Signal Generator SG1200)
6	ISO 17025-accredited calibration for system
7	Amplifier removed; requires use of external amplifier.

MODEL CONFIGURATIONS

MODEL	DESCRIPTION
CI00250AM1	Includes Option 4
CI00250AM2	Includes Option 1
CI00250AM3	Includes Options 1 and 4
CI00250AM4	Includes Options 1 and 3
CI00250AM5	Includes Option 5
CI00250AM6	Includes Options 3 and 5
CI00250AM7	Includes Option 6
CI00250AM8	Includes Options 3 and 6
CI00250AM9	Includes Options 3 and 4
CI00250AM10	Includes Options 1, 3 and 4
CI00250AM11	Includes Option 7
CI00250AM12	Includes Options 4 and 6
CI00250AM13	Includes Option 1 and 2

Accessory Kits

Application	Model	Description
IEC 61000-4-6 BCI Clamp 50Ω System	TK1000	Conducted immunity test kit containing all the attenuators, injection probes, calibration fixtures, calibration resistors, and termination resistors necessary for IEC testing.
IEC 61000-4-6 BCI Clamp 150Ω System	TK1001	Conducted immunity test kit containing all the attenuators, injection probes, calibration fixtures, calibration resistors, and termination resistors necessary for IEC testing.
IEC 61000-4-6 EM Clamp 50Ω System	TK1002	Conducted immunity test kit containing all the attenuators, injection probes, calibration fixtures, calibration resistors, and termination resistors necessary for IEC testing.