

**Model CI00250A,
M1 through M11
RF Conducted Immunity System
75 Watts
10 kHz–250 MHz**



Complete Testing Solutions to the following standards:

- EN/IEC 61000-4-6
- IEC 60601-1-2
- EN 50130-4
- EN 61000-6-1/2
- EN 55024
- CISPR 14-2

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 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.

| 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 |

*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 | 9 kHz to 1.2 GHz | 100kHz to 6 GHz |
| resolution | 1Hz | 0.01 Hz |
| Power range | -140 to +13 dBm | -110 to +7 dBm |
| resolution | 0.1dB | 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 |

| 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 |

| 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) |

| PC Requirements | |
|-------------------|---------------------------|
| Computer | Pentium IV, 1 GHz minimum |
| Operating system | Windows XP, Vista, 7 |
| RAM | 1 Gb Minimum |
| Screen Resolution | 1024 x 768 |
| Ports | 2 available USB 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. |

| 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) |

| 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 |