



Model CI00401, M1, M2
RF Conducted Immunity System
150 Watts
100 kHz–400 MHz

Complete Testing Solutions to the following standards:

- ISO 11452-4
- GMW 3097
- ES-XW7T-1A278-AC
- DC-11224
- BMW GS95002
- Peugeot B217110
- Renault 36-00-8081-G
- IEC 61000-4-6
- Other automotive standards

The Model CI00401 is a fully self-contained state of the art system designed to test RF Conducted Immunity. The CI00401 contains all the instruments needed to perform conducted immunity testing for automotive and IEC specifications. The system contains a signal generator, three channels of power monitoring, 150W AR amplifier 100 kHz to 400 MHz, directional coupler, and control software. Everything is contained in a single housing, which eliminates setup issues. This system provides 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 (See Note 1)	
ISO 11452-4	
GMW 3097	
ES-XW7T-1A278-AC	
DC-11224	
BMW GS95002	
Peugeot B217110	
Renault 36-00-8081-G	
IEC-61000-4-6	
Other automotive standards	

Signal Generator Specifications	
Frequency range resolution	9 kHz to 1.2 GHz 1Hz
Power range resolution	-140 to +13 dBm 0.1 dB
Modulation	AM, FSK, FM, Phase, External Pulse

Power Meter Specifications (See Note 2)	
Power heads	3
Type	Diode
Frequency	10 kHz to 8 GHz
Range	-60 to +20 dBm

RF Amplifier Specifications	
Frequency range	100 kHz to 400 MHz
Power rating	150 Watts Minimum
1dB compression	120 Watts Minimum
Harmonic Distortion	-20 dBc at 120 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	52 dB minimum

NOTE 1: Specifications can be met using AR-specified external accessories (injection probes, monitor probes, cal fixtures, CDN's, attenuators, etc.) Contact AR for further information.

NOTE 2: The use of a spectrum analyzer may be necessary on some of the low level bulk current injection tests. This is especially true on power and I/O lines with a great amount of ambient noise.

Connections	
RF Out	Type N Male (front)
Monitor port In	Type N Male (front)
Signal Generator Out	Type N Male (rear)
Directional Coupler In	Type N Male (rear)
Amplifier out/in	Type N Male (rear)
Pulse In	BNC Male (rear)
Communication	GPIB (IEEE 488) (rear)

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	22.7 kg (50.0 lb)

PC Requirements	
Computer	Pentium IV, 1 GHz Minimum
Operating system	Windows 2000, XP, Vista
RAM	1 GB Minimum
Screen Resolution	1024 x 768
Ports	2 available USB ports
GPIB adaptor	USB to GPIB adaptor included (NI GPIB-USB-HS)

Options	
1	External USB data acquisition card.
2	Laptop PC with software preinstalled

MODEL CONFIGURATIONS

MODEL	DESCRIPTION
CI00401M1	Includes Option 2
CI00401M2	Includes Options 1 and 2

ACCESSORY KITS

Application	Model	Description
IEC 61000-4-6*	TK1000	Conducted immunity test kit containing all the attenuators, injection probes, calibration fixtures, calibration resistors, and termination resistors necessary for IEC testing.
Automotive	TK3000	Conducted immunity test kit containing all the attenuators, injection probes, calibration fixtures, calibration resistors, and termination resistors necessary for automotive testing.

*Requires additional AF10050, 10 dB, 50-watt attenuator.