

Radiated Immunity Test Systems and Pre-Compliance Test Systems

AR has self-contained "systems" to get you where you want to go quicker, easier, and with the highest level of accuracy & dependability.

DC - 45 GHz and power that takes you as far as you want to go.

For Speed, Accuracy And Efficiency, You Can't Beat the AR Systems

We have complete test systems "on the shelf" that perform entire tests with just the press of a few buttons. We also create customer-specific systems for a variety of applications; and we can design something for your applications.

Everything you need is in one self-contained unit - amplifiers, antennas, couplers, field monitors, power meters, signal generators, system controllers, receivers, and more, along with the software to monitor and control it all. Set-up is no longer a problem. With an AR system, it's fairly simple to perform even the most complex tests ... with more efficiency and accuracy than ever before.

Peace of Mind is Built Into Every AR System.

Every product in your AR test system is designed and built to the highest quality standards, and backed by the most comprehensive warranty in the business and a global support network that's second to none. When you have a question about any part of the system, you know exactly who to call. We've been here since 1969, and we'll continue to serve your needs and engineer the products that meet tomorrow's challenges.

Custom Radiated Immunity Test Systems Your System, Your Way.

Give us your requirements, we'll give you a state-of-the-art test system. We've got the power - and the frequency you need - DC to 45 GHz. Whether you simply need a few amplifiers housed in a single rack or a complex combination of amplifiers, field probes, field monitors, power meters, signal generators, antennas, we'll meet the challenge.

ARcell Pre-Compliance Test Systems Help You Get to Market Faster... ahead of your competition.

In a competitive marketplace, time is critical. If you lose time because of a failure at the test house, your competition may beat you to market. And your opportunity could be lost.

Test As You Go.

The ARcell Systems are out-of-the-box immunity and emissions test systems that make it practical and affordable to test your electronic product for compliance as you design it. This helps guard against remedial design, speed time to market, and get to the test house ready for certification.

Testing as you go not only saves you serious time, it allows you to pinpoint which components, if any, are causing radiated immunity or radiated emissions problems. If you test only the finished product, and it fails, you then have to figure out which component(s) caused the failure, delaying getting your product to market.



AS4000 System



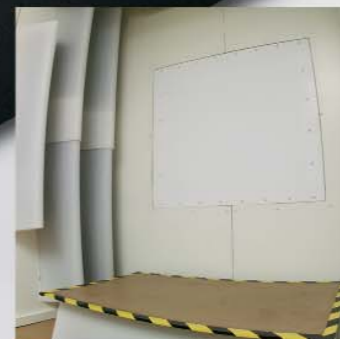
TC4000, part of a FS4010 System



Antenna Rotation on TC4000



Rugged Door Hinge on TC4000



EUT Uniform Zone in TC4000



Knife Edge Door on TC4000

You Can't Beat the AR Systems

Everything is included.

The ARcell System includes everything you need to perform pre-compliance testing for IEC 61000-4-3 requirements as well as to other industry-specific standards that have adopted benchmarks:

- IEC 61000-4-3
- EN 61000-6-1
- EN 60601-1-2:1993
- EN 55024:1998
- EN 55014-1:2000
- EN 61000-6-2
- IEC 60601-1-2:2001

The reasons why you should consider an AR test cell:

- Compact size that saves space
- Can be placed within inches of existing walls
- Relatively lightweight & moveable - some models are on wheels
- Self-contained
- No permanent installation required
- Testing as you go allows you to experiment with components that are more cost-efficient
- Allows you to fix problems earlier in the design stage

ARcell Models

AR Cells are the heart of the ARcell Systems. The cells bridge the gap between size-limited TEM cells and expensive anechoic chambers. They're available in three sizes to accommodate test objects up to 1m cubed; and our unique design enables the free-space systems to fit into small areas within a few inches from existing walls and ceilings. AR even has test cells on wheels, so you can roll them out whenever you need them.

TC2000C

1.2x1.2x2.7m Test Cell, 10 kHz - 4.2 GHz
max EUT size 50 cm/side (19.7 in.)

TC3000B

2.4x2.6x4.5m Test Cell, 27 MHz - 4.2 GHz
max EUT size 100 cm/side 39.37 in.)

TC4000B

2.4x2.6x5.7m Test Cell, MHz - 4.2 GHz
max EUT size 100 cm/side 39.37 in.)

Advantages of the ARcell

- Large access for installation and removal of the EUT
- Viewing window (located in the access door) to observe the EUT
- Interior light with external on/off switch configured for 110 VAC or 220 VAC (depending upon destination country)
- 16 Amp resettable circuit breaker
- Door open interlock
- User modified access plate

ARcell Pre-Compliance Test systems

The following systems contain all the components needed to produce, measure, level and run to specific fields within the supplied ARcell.

10 V/m with 80% Amplitude Modulation from 80 - 1,000 MHz Test Systems

These systems contain: ARcell; AR amplifier; PC with GPIB, DAQ cards and pre-installed AR emissions and immunity software; directional coupler; 100 kHz - 6 GHz RF field probe kit; signal generator; low noise amplifier; power meter with diode head; probe stand; console; printer; and cables.

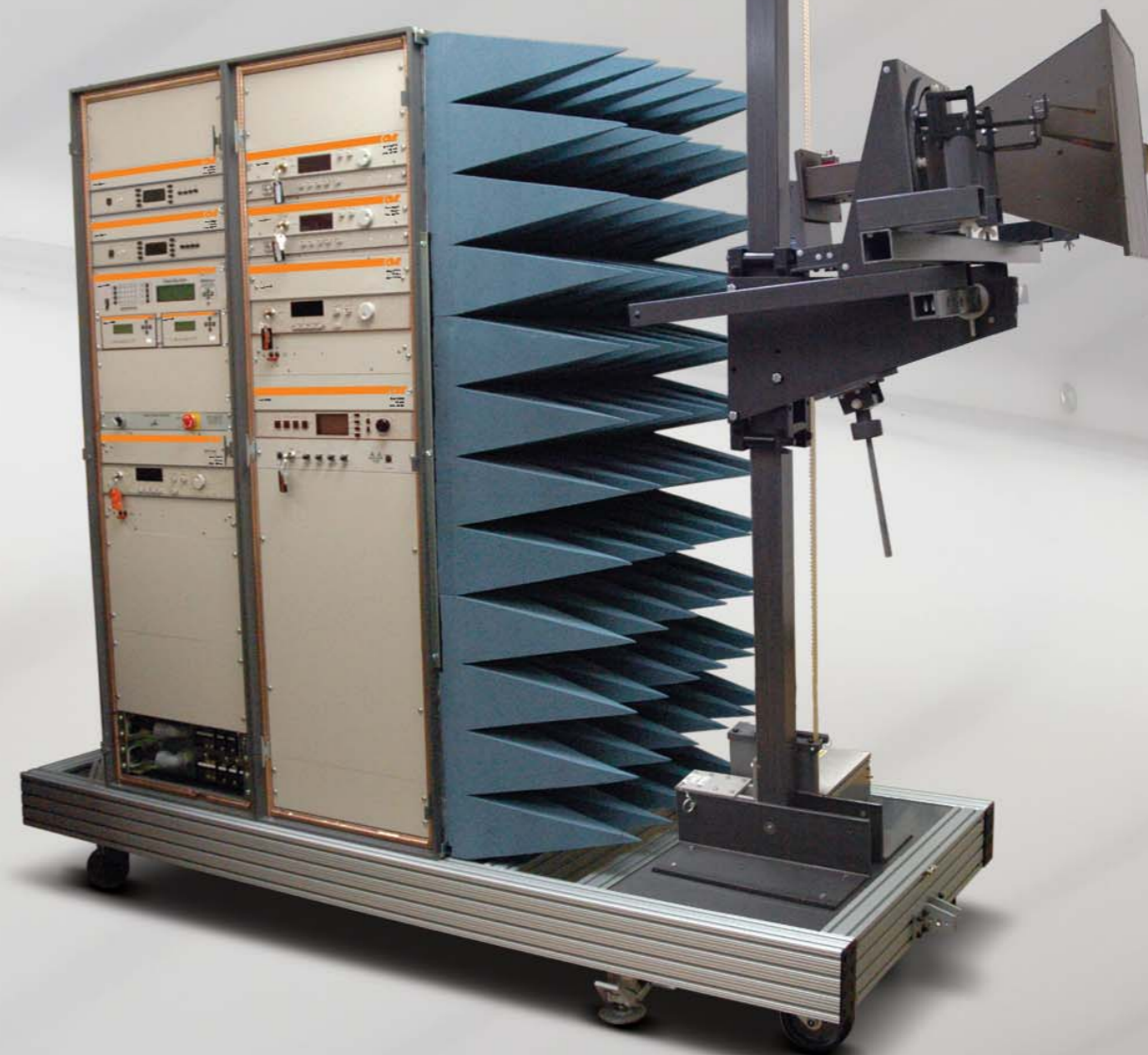
- Model FS2010: Includes TC2000C cell (max EUT size 50 cm/side), 30-Watt amplifier, and system controller
- Model FS3010B: Includes TC3000B cell (max EUT size 100 cm/side) and a 150-Watt amplifier
- Model FS4010: Includes TC4000B cell (max EUT size 100 cm/side) and a 150-Watt amplifier

50 V/m from 80 - 1,000 MHz Test System

- Model FS2050: Includes TC2000C cell (max EUT size 50 cm/side); 150-Watt AR amplifier; PC with GPIB, DAQ cards and pre-installed AR emissions and immunity software; directional coupler; signal generator; power meter with diode head; 100 kHz - 6 GHz RF field probe kit; low noise amplifier; system controller; probe stand; console; printer; and cables.

100 V/m from 1 - 1,000 MHz Test System

- Model FS2100: Includes TC2000C cell (max EUT size 50 cm/side); 10 kHz - 100 MHz 500-Watt AR amplifier and 80 - 1,000 MHz 500-watt AR amplifier; PC with GPIB, DAQ cards and pre-installed AR emissions and immunity software; directional coupler; signal generator; power meter with diode head; 100 kHz - 6 GHz RF field probe kit; low noise amplifier; system controller; probe stand; console; printer; and cables.



Application-Specific Systems Already Developed and Ready to Go.

We've already built several systems for customers' specific applications including:

Current application-specific systems include:

- Model AS01006 - Designed for automotive vehicle radiated immunity testing up to 200 V/m at 3 meter test distance from 100 MHz - 1 GHz.
- Model AS01007 - Designed for automotive whole vehicle radiated immunity testing up to 200 V/m at 3 meter test distance from 30 MHz - 1 GHz.
- Model AS01008 - Designed for MIL STD radiated immunity testing up to 200 V/m at 1 meter distance from 10 kHz - 1 GHz.

Model AS40000 Radiated Immunity Test System

(800 MHz - 40 GHz / 200 V/m)

This customized system is designed to grow with your needs. Add up to five amplifiers (with a dedicated, frequency matched antenna for each amplifier), a field monitor, two power meters, two signal generators, and a 20-foot antenna mast with up to five antennas.

The All-in-One, Ready-to-Go RF Radiated Immunity System

Model RI06000 (250 kHz - 6 GHz) contains all instrumentation needed to perform automated radiated immunity testing for IEC 61000-4-3 specification except the required amplifiers, antennas, and directional couplers.

Model RI06000 has the versatility needed for every test lab and equipment manufacturer. It contains a signal generator, 2-channel power meter, two power heads, RF field probe / monitor, RF switch matrix, and automated radiated immunity test software. Several of the components can be used independently of the system. Up to four amplifiers and directional couplers can be controlled and monitored. The system is also available with an optional desktop or laptop PC.

To see a list of the systems we've built on request for customers, visit our website at www.ar-worldwide.com

AR Competitive Edge.

At AR, there's no substitute for quality. It's the foundation of our business and the AR value that's recognized around the globe. It's one of the key reasons AR has become the worldwide leader in EMC, Wireless and beyond.

AR products do more, last longer, work harder and make your job easier. And that gives you a fierce competitive edge. Only AR delivers innovative technology, advanced design, quality build & workmanship, mismatch capability, durability & longevity, less cost Watt for Watt, and a worldwide support network that's here for you today and tomorrow.

With the combined resources of all the AR companies, we simply have more of the best people making the best products to overcome your toughest challenges.

AR RF/Microwave Instrumentation

- RF Amplifiers 1 to 10,000 Watts, dc to 1 GHz
- Microwave Amplifiers 1 to 16,000 Watts, 0.8 to 45 GHz
- Antennas 1 to 15,000 Watts, 10 kHz to 50 GHz
- Transient Generators
- Pre-Compliance Test Systems
- Accessories and Software

AR Modular RF

- RF Amplifiers and Modules
- Broadband and Sub-band Solid State RF Amplifiers
- Booster Amplifiers for Tactical Military Radios

AR Receiver Systems

A line of products for EMC Testing including:

- EMI Receivers
- Impulse Generators and Measurement Systems
- Leak Detectors

AR Receiver Systems products can be purchased through AR RF/Microwave Instrumentation

AR Europe

- Offering a complete line of RF Products and testing solutions for the European Market

Want to know more about AR? Need help with any RF solutions or testing procedures?

Here's how to reach AR and get all the help you need:

www.ar-worldwide.com

AR RF/Microwave Instrumentation

160 School House Road,
Souderton, PA 18964-9990 USA
Tel 215-723-8181

For RF Amplifier modules, contact:

AR Modular RF

11807 North Creek Parkway South, Suite 109,
Bothell, Washington 98011 USA
Tel 425-485-9000 • Fax 425-486-9657

For receiver systems, contact:

AR Receiver Systems

Tel 800-933-8181

AR RF/Microwave Instrumentation is
ISO Certified.*

ISO 9001:2000
Certified



AR Global Promise

The AR warranty is more than just a warranty, it's a promise, backed by a knowledgeable support team that's always there for you to help solve any problems and answer any questions, today and tomorrow. AR warrants its amplifiers (all parts excluding traveling wave and vacuum tubes), antennas, pre-compliance test systems, transient generators, power meters, field monitoring equipment, conducted immunity generators, signal generators, couplers and tripods to be free of defects in materials and workmanship for a period of three years from date of shipment. Traveling wave tubes on the following amplifier models 200T1G3A, 200T2G8A, 200T8G18A, 250T1G3, 250T8G18 carry a two-year warranty. Vacuum tubes on our "L" series amplifiers and other traveling-wave tubes as well as powerheads carry a one-year warranty.

*ISO9001-2000 certification applies to AR RF/Microwave Instrumentation,
not to AR Modular RF & AR Receiver Systems.

