DVTEST

dbGUARD

Shield. Test. Repeat.

Shield unwanted signals with up to 100dB of isolation from DC to 18GHz thanks to our IASG technology.

Test capability is compatible with all stages of device manufacturing and service. Efficiently and quickly test new devices using our interchangeable test cartridges.

Repeat measurements with 100% confidence. Robust ergonomically engineered design makes the dbGuard the most durable RF enclosure on the market.

Industry Requirements

Eliminate unwanted real world signals from affecting your testing of today's sensitive wireless devices. Low power level devices are emerging in wireless technology. High isolation is required to block interference and noise from entering the test environment.

Most RF enclosures on the market today do not meet the rigorous demands of 24/7 production, and tend to degrade within months of deployment.

Wireless devices have single or multiple embedded antennas which are difficult to test.

Reduce the cost of test. RF enclosures should be able to accommodate multiple DUTs.

Loading and unloading DUTs can take longer than the actual test time.

By 2016, the number of mobile devices is expected to hit 8 billion..

dbGUARD

The dbGuard provides up to 100dB isolation from DC to 18GHz. The IASG (Inverted Assymetric Squarewave Gasket) design eliminates any leakage along the perimeter of the RF enclosure. This makes the dbGuard condusive to testing all wireless technologies including: 5G/LTE, Wi-Fi, Bluetooth, ZigBee, WiMAX, etc.

The interior cavity is finished with a next generation RF absorptive coating similar to what is found in stealth technology. This allows DUT positioning without affecting attenuation caused by reflections.

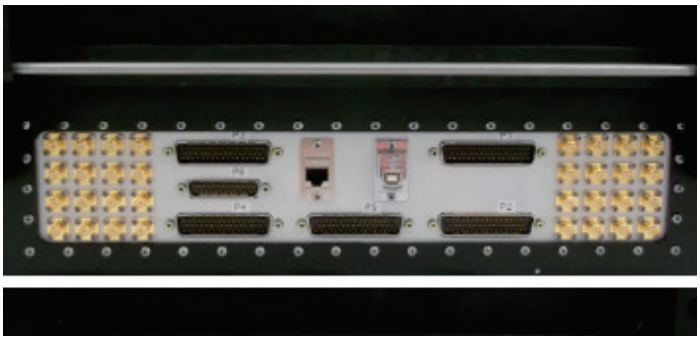
Each half of the dbGuard enclosure is machined from a single piece of aluminum to ensure fit and function. The clam shell design provides ample space for easy access to the DUT. The spacious interior makes it possible to test multiple DUTs inside one single dbGuard.

The dbGuard's versatile grid-arrays are ideal for mounting test cartridges, adapters, cameras, speakers, and other end user devices. The baseplate also features a recessed pocket, compatible with our dbCoupler series of broadband antenna couplers, for a flushmount fit.

The gas spring assisted single hand lever design creates an ergonomic environment for users. For high volume manufacturing, the dbGuard can be automated with pneumatics, complete with a 2-handed control system for full compliance with workplace occupational ealth & Safety regulations.

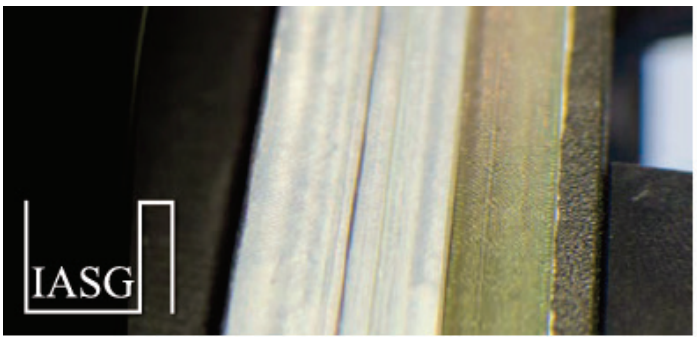
Performance Engineered Design

- Precision machined from a single block of 6061 aluminum
- Ergonomic latching system with assisted gas shocks
- Small, medium, large, and custom sizes are available



Custom I/O Panel

- RF input: SMA, SMB, BNC, TNC, UHF, N
- RF filtered connectors: USB1.1/2.0
- Ethernet 10/100
- Fiber optics: ST and FC
- Data: DB9, DB15, DB25, DB37, DB50, RJ11
- AC: filtered AC feedthru with 2500pF filter; 120/240V power strips
- Waveguide port, Air ventilation

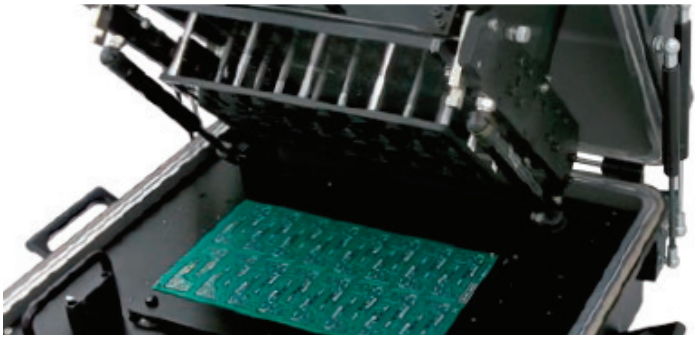


RF Gaskets

- RF shielding gaskets are manufactured from high metal content alloys
- RF Gaskets are used on all mechanical seams and I/O
- connections to eliminate RF leakage
- Inverted Asymmetrical Squarewave Gasket (IASG) dual gasket
- design provides superior and repetitive RF isolation
- Gaskets can easily be replaced in the field

Antenna Coupler Integration

- Recessed pocket allows flushmount installation of dbCoupler
- series of broadband antenna couplers
- RF cabling is plumbed through the base for a clean finish



Interchangeable Test Cartridge

- Modular test cartridges allow a variety of DUTs to be tested
- PCBs to finished product can be tested in the same enclosure
- Quickly and easily swap test cartridges

dbGUARD Specifications

Shielding effectiveness (double wall)	100dB @ DC - 6GHz 85dB @ 6GHz - 10GHz 70dB @ 10GHz - 18GHz	**RF gasket type**	Braid over foam
Latching	Single bar	**Available sizes: All dimensions are interior L x W x H**	S - 14.75” x 7.5” x 7” M - 15.25” x 15.25” 7.5” L - 16.5” x 18.6” x 9.25”
External options	Pneumatic Control Station Adjustable lift rate hydraulics dampers ITAR compliant locking system	**I/O panel options**	D-Sub USB 2.0/3.0 Ethernet Pneumatic RF connectors Optical
Internal options	RF absorptive foam insert Acoustic absorptive foam kit Flat response antennasLid closure detector Universal pegboard		
Loading Style	Clamshell	**Warranty**	1 year parts and labour

Size Comparion

Small

Medium

Large