

 DVTEST

dbSAFE

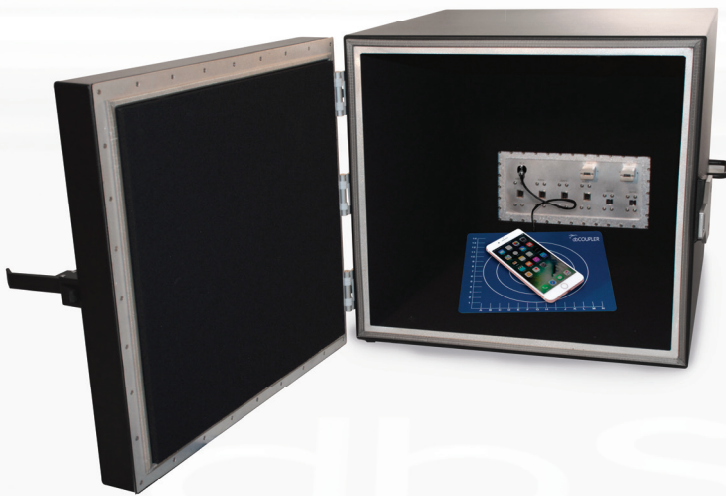


Isolate. Test. Adapt.

Isolate test environments from unwanted signals. The dbSAFE is an RF enclosure with a double wall design that offers the best RF shielding in its class; 100dB* isolation from 300MHz to 13GHz.

Test wireless devices in a cost-effective RF enclosure. The double wall design guarantees more than 100dB of isolation that is required for testing emerging low-power wireless devices. RF connections are made with minimum path loss to ensure higher RF quality.

Adapt the dbSAFE to your test requirements. In addition to having three standard sizes, the dbSAFE can also be manufactured to any size. The field upgradeable custom I/O panel offers flexible testing options for different applications. The dbSAFE can also be configured for thermal testing.



dbSAFE

Industry Requirements

The technology trend is to squeeze higher frequency and more functionality into a lower power and smaller chip area, making the device more susceptible to interference.

A higher data rate in communication between new wireless devices mandates improved shielding for RF enclosures.

Testing in RF shielded rooms can be expensive, while a cost effective and portable RF enclosure is an ideal solution.

Different wireless standards exist today and Strict shielding regulations are dictated by industry and government.

Different wireless technologies co-exist on the same device, requiring multiple access points to the DUT.

Products have shorter and shorter life spans so the test equipment used must be flexible, adaptable, and reused whenever possible.

The worldwide market for wearable devices is expected to grow to around 155.7 million units by 2019.

dbSAFE

RF enclosures are now a necessity for testing wireless devices. The dbSAFE offers unmatched isolation in its class; up to 100dB* from 300MHz to 13GHz.

The dbSAFE has been engineered from the ground up to provide superior RF isolation and performance while being cost effective.

The dbSAFE can be designed and manufactured to almost any size and dimensions.

Additional testing accessories, such as antenna positioners and mounting brackets can be added to accommodate different test setups.

The flexible custom I/O panel allows multiple connections for RF, ethernet, data, power, fiber optics, and waveguides. This panel can also be changed on-site as projects change.

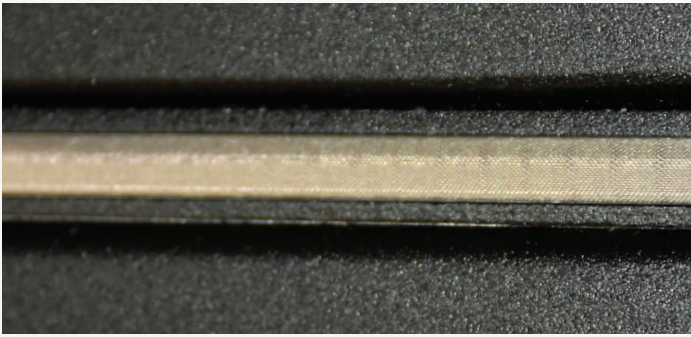
The double wall design provides higher shielding effectiveness which is required for testing low power sensitive devices.

Custom RF absorber foam eliminates unwanted reflections within the RF enclosure.



RF Absorber Foam Liner

- The dbSAFE minimizes reflections across its interior with the use of an RF absorbing foam liner, which is precision cut and fitted to the exact interior dimensions. This allows the DUT to be positioned anywhere with virtually no effect on attenuation caused by reflections or leaks



RF Gaskets

- RF gaskets are used in all seams and I/O connections to eliminate leakage
- The main RF seal uses a braid over foam gasket precisely installed on the enclosure's integrated lip channel, providing a perfect seal each and every time



Double Wall Construction

- The exterior of the dbSAFE is composed of two layers of aluminum with a gap between them. This form of construction not only improves the structural strength of the enclosure, but provides an additional 20dB of RF isolation



User Defined I/O Panel

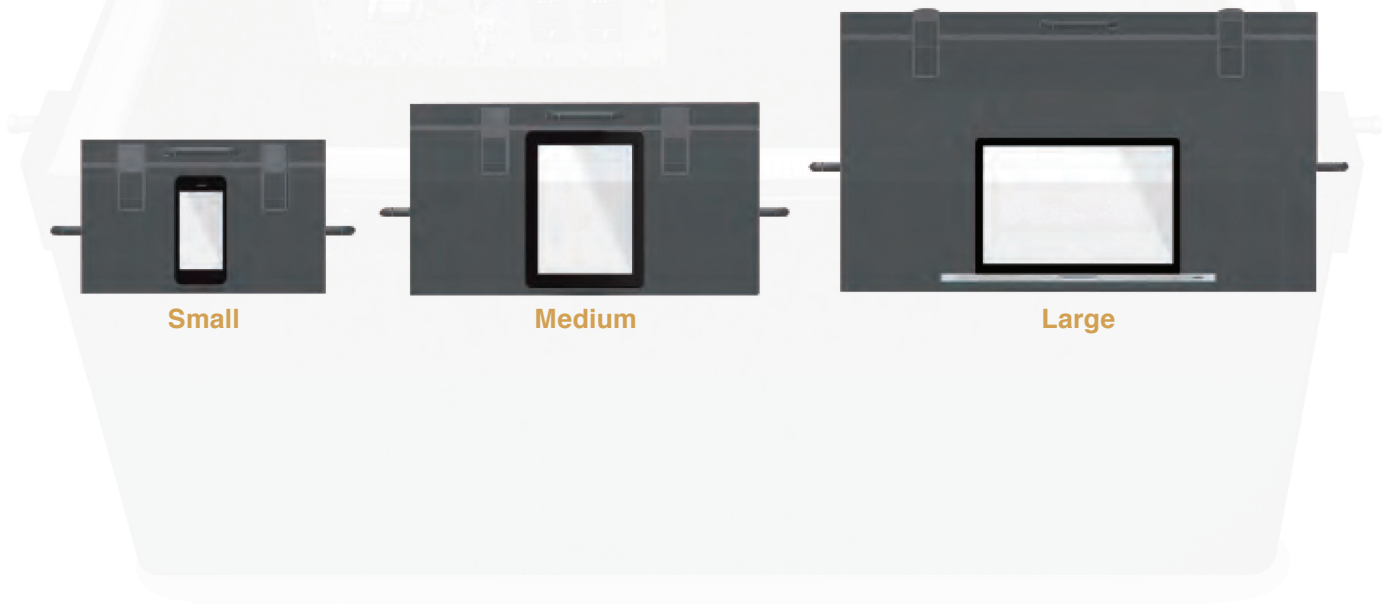
- RF Ports: SMA, SMB, BNC, TNC, UHF, N
- RF filtered connectors: USB1.1/2.0/3.0
- Ethernet 10/100/1000 Base-T - 1Gbps - PoE/PoE+
- Ethernet 10Gbps - PoE/PoE+
- HDMI 1.4 , 2.0
- Fiber optics: ST and FC
- Data: DB9, DB15, DB25, DB37, DB50, RJ11
- AC: filtered AC interface with EMI filter; 120/220V power module
- DC filtered interface; 0-150VDC, 20A
- Waveguide with 6 or 12 ports for fiber insertion
- Air ventilation with AC or DC fan



dbSAFE Specifications

Shielding effectiveness* (Double wall)	300MHz - 2GHz ≥100dB 2GHz - 3GHz 100dB 3GHz - 6GHz 90dB 6GHz - 13GHz 80dB	RF gasket type	Braid over foam
Door Opening	Dual latch Single or double point lever latch (Ergonomic latches)	I/O panel options	RF connectors USB Ethernet, Optical D-Sub HDMI DC AC Power
Door options	Top opening Front opening Clamshell	Standard rack-mount options:	4U and 10U with front load opening
Available sizes: All dimensions W x D x H Inch (mm)	dbSAFE Small Ext: 13.5"(340) x 11"(280) x 8.5"(215) Int: 11"(280) x 8.5"(215) x 6"(150) dbSAFE Medium Ext: 19.5"(500) x 13.5"(340) x 10.5"(270) Int: 17"(430) x 11"(280) x 8"(200) dbSAFE Large Ext: 26.5"(670) x 17.5"(450) x 15.5"(390) Int: 24"(610) x 15"(380) x 13"(330)	Other Configurations Inch (mm)	dbSAFE 4U Ext: 19"(480) x 25"(635) x 7"(180) Int: 14"(355) x 20"(510) x 4"(100) dbSAFE 10U Ext: 19"(480) x 25"(635) x 17"(430) Int: 14"(355) x 20"(510) x 14"(355) dbMAX Ext: 24"(610) x 26"(660) x 32"(810) Int: 18"(460) x 24"(610) x 30"(760)
Standard Bench-top option:	Bench-top front load (Customizable) Bench-top top load (Customizable)	Warranty	1 year parts and labour
Loading Style	Pneumatic Control Station Adjustable lift rate hydraulics dampers ITAR compliant locking system		

Size Comparison



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