



STE RF Shielded Test Enclosures

- ✓ Wireless device testing!
- **✓** Forensics Isolation!
- ✔ Perfect for 802.11a, b, g, n, WiMAX
- ✓ Cellular, PCS, GSM, 3G testing
 ✓ 802.15, Bluetooth[®], Wibree, RFID, ZigBee testing
- ✓ Wide variety of I/O options are "standard"!
- ✓ Super isolation up to 18 GHz!
- ✓ RF radiating test fixture models for absolute repeatability testing of wireless devices!
- Stock models to fit your custom applications!

Trust YOUR RF Testing To Our Proven Patented Design!

THE RF SCREEN ROOM ON YOUR BENCH!

In 1997 Ramsey took the technician out of the large expensive shielded screen room and put his hands and eyes into a portable benchtop RF Shielded Test Enclosure. With thousands placed in service worldwide the patented STE technology became the standard for efficient and cost effective RF isolation testing. That legacy has continued with a wide variety of STE's to suit every RF test application and the size requirements you have today. Our exclusive double lip gasket technology assures an RF tight seal each and every time. Steady-hold hinges maintain the opening at any location and prevent gasket compression due to prolonged closure pressure when not in use. Our STE2800 and STE3800 STE's feature our RTF Radiating Test Fixture with a built-in broadband antenna to properly test wireless communications devices with guaranteed repeatability. All of the STE's feature a wide variety of available I/O connection and interface options and RF filtered feed-throughs. All available to fit your custom requirements with the pricing and delivery of a stock unit!

The "Portable Test Box" or STE2200 evolved from its big brother the STE3000B. Designed specifically for TDMA, CDMA, AMPS, PCS, GSM and other small communication devices, it is constructed to the same precision-machined tolerances as our patented STE3000B to maintain an exceptionally well shielded environment. Heavy duty, rugged .090 and .125 aluminum is used throughout and our double lip, high performance gaskets are used at all joint locations assuring a reliable RF tight closure. Oversized hinges and latches are used to provide a physically tight seal every time. RF absorbent foam lines the interior to provide a typical RF attenuation of -90dB @ 3GHz! Perfect for 2.4GHz testing. Input/output connections and options can be configured to match your needs.

FEATURES			
 RF absorbent foam liner 			
 Exclusive double lip RF tight gasket 			
 Easy release handle 			
 Steady-hold hinge 			

Designed for compact devices

None provided standard. Custom configured,

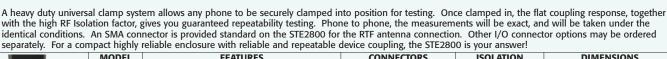
see options below.

ISOLATION DIMENSIONS 41/2"H x 71/4"W x 93/4"D 100dB @ 1GHz 31/4"H x 6"W x 81/2" D -90dB @ 3GHz (Nom. Inside Dimensions) -80dB @ 6GHz

COST \$439.00

STE2800

Designed around the STE2200, we took the task of repeatability testing of TDMA, CDMA, AMPS, PCS and GSM phones, and other wireless communications to a new level! For more than a decade Ramsey's RTF Radiating Test Fixture was the standard in pager testing and alignment. Now, designed specifically for such communications devices, the RTF has a built-in embedded antenna to cover 800 MHz to 8 GHz.





MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
STE2800	 Integral RF radiating test fixture (RTF) 	SMA to built-in RTF	-100dB @ 1GHz	41/2"H x 71/4"W x 93/4"D	\$959.00
	Flat Coupling Factor 800MHz - 8 GHz	antenna provided	-90dB @ 3GHz	3"H x 6"W x 8½" D	,
	Provides absolute repeatability testing	standard.	-80dB @ 6GHz	(Nom. Inside Dimensions	
	Exclusive double lip RF tight gasket			Above RTF)	
	RF absorbent foam liner	Additional connectors			
	Easy release handle	available, see options			
	Steady-hold hinge	below.			

Our broad line of STE series Shielded Test Enclosures were already being used for virtually all wireless LAN device tests. But the daunting task was how to streamline the testing, while reducing the physical space required for simultaneous high volume testing. Our engineers started to work with a number of manufacturers to find out exactly what was needed.

Wow... multiple boards, blades, WAPS and other devices had to be physically mounted in close proximity. They couldn't "talk to each other", they couldn't "talk to the outside world", they had to run cool within their published specs in a small confined space over a long period of time, there needed to be suitable filtered I/O connections, RF feed throughs, KF isolation was critical, and there had to be a lot of them running simultaneously in a small lab. Pretty tall wish list. But once again, Ramsey came through...with flying colors! Als



COIOTS! AISO	iors: Also available in dual rack mount and snock mounted road case versions:					
MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST	
STE2900	 Designed for WLAN testing 	None provided	-90dB @ 1GHz	11"H x 8"W x 14"D	\$995.00	
	 Front loading swing away door 	standard.	-90dB @ 3GHz	10"H x 7"W x 13"D		
	Dual ventilation or fan forced cooling		-80dB @ 6GHz	(Nom. Inside Dimensions)		
	Exclusive double lip RF tight gasket	Custom configured,				
	Universal I/O connector interface plate	see options below.				
	RF absorbent foam liner					
	Optional security locking latch available					

FEATURES



STF2902

If you're looking for the ultimate test enclosure system for your dense pack test environment, the STE2902 is your answer! Designed for space saving 19" rack mounting, the STE2902 contains TWO STE2900 WLAN test enclosures in one single 7 rack unit (121/4" high) package! The integrated custom rack shelf provides mounting and support for use in your standard 19" racks. Front loading doors swing away to the left for easy installation and access to your DUT. Also available in a shock mounted road case for

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ODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST		
		None provided	-90dB @ 1GHz	12.2"H x 19"W x 17.4"D	\$2,095.00		
	Designed for WLAN testing	standard.	-90dB @ 3GHz	10"H x 7"W x 13"D			
	 Front loading swing away doors 		-80dB @ 6GHz	(Nom. Inside Dimensions per			
	 Dual ventilation or fan forced cooling 	Custom configured,		chamber)			
	Exclusive double lip RF tight gaskets	see options below.		-			
	Universal I/O connector interface plates						
	RF absorbent foam liner						
	Optional security locking latches available						
	, ,				,		

STE2902C

A large number of manufacturers requested a dual rack mount test system in a stand alone package. This was for benchtop and field use, where existing 19" rack cabinets were not available. We took our highly popular STE2902 dual WLAN test enclosure and installed it in a high impact shock road case! This provided not only a self contained test system, but a convenient method to ship the STE2900 system! Special rear mount supports are included to withstand shipping and road abuse. As a plus, the shock cases are "keyed" on the top and bottom to provide locked stacking of multiple units. All this in a case that measures 19.2" high!



	MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
_	STE2902C	8			19.25"H x 25"W x 22.5"D	\$2,395.00
À		Designed for WLAN testing	standard.	-90dB @ 3GHz	10"H x 7"W x 13"D	
W.		 Front loading swing away doors 		-80dB @ 6GHz	(Nom. Inside Dimensions per	
1		Dual ventilation or fan forced cooling	Custom configured,		chamber)	
II.		Exclusive double lip RF tight gaskets	see options below.			
,		 Universal I/O connector interface plates 				
		RF absorbent foam liner				
		 Optional security locking latches available 				

STE3000B

The RF Test Enclosure that started it all! How do you troubleshoot, tune, align, and test a device in an RF free and interference free environment? Well, up until now you had to invest in a very expensive RF screen room. Our patented STE3000B brought that technology right down to your bench, and the cost all the way down to affordable!

Now you can work and see inside the box rather than sit inside an expensive screen room. Working access is made possible with our custom designed silver impregnated, ultra fine mesh gloves. These gloves offer an RF tight seal to the box yet give you excellent manual dexterity and hands on access to devices under test. Once the cover is closed, a large RF tight viewing window overlooks the entire working area that is illuminated with built-in noise free lighting. It doesn't get much easier than that! All I/O connections and options are milled into a removable 304 stainless steel panel to allow for future changes. Simply choose the I/O's and interfaces you require when ordering, and the STE3000B will be custom designed to your spec. Sounds too good to be true? We thought so too; that's why we have a patent on it!



		I EXTIGILES	COMMEDIA	15027111011	Dimensions	
	STE3000B	RF absorbent foam liner	6 pole filtered 120VAC	-90dB @ 1GHz	123/4"H x 18"W x 12"D	\$1,095.00
		Exclusive double lip RF tight gasket	AC outlet strip; 6 pole	-90dB @ 3GHz	8"H x 163/4"W x 101/2"D	
		Universal I/O connector interface plate	filtered barrier strip	-80dB @ 6GHz	(Nom. Inside Dimensions)	
~		RF tight "hands-on" silver mesh gloves	feedthrough.			
		RF tight illuminated viewing window				
3		Gas filled cover strut	Custom configured,			
		Designed for hands-on adjustment	see options below			
		and alignment of devices				

CONNECTORS ISOLATION

STE3000F

Just as Ramsey led the field in RF isolation test products for pager, two way, cellular, PCS, and WLAN testing, we were right there to support the forensic industry in their requirements for data isolation and collection of wireless communications devices! Forensic investigation of cell phones, PDA's, and other hand-held wireless devices specifically requires complete hands-on manipulation of the wireless device to identify and extract data while maintaining complete RF isolation from the outside world. We started with our patented STE3000B enclosure with two RF isolated hands-on gloves to provide complete hands-on access to the device. Viewing of the device is provided through the RF isolated illuminated viewing window. A RF filtered 6 outlet internal power strip is included to maintain power to the DUT throughout test and observation to prevent possible loss of data. From there, we pre-costomized the enclosure for the typical forensic application. We included an RF filtered RS-232 serial bulkhead feedthru connector and an RF filtered USB1.1 data port bulkhead feedthru to give you data access to the wireless device under test or observation. Additional I/O connectors may be ordered to suite your specific needs. Looking for the standard in forensic testing? We have you covered.



MODEL

STE3000F

FEATURES
 Designed specifically for forensic wireless
device isolation and data retrieval
RF absorbent foam liner
Exclusive double lip RF tight gasket
Universal I/O connector interface plate
RF tight "hands-on" silver mesh gloves
RF tight illuminated viewing window
Gas filled cover strut

CONNECTORS
6 pole filtered 120VAC
AC outlet strip; 6 pole
filtered barrier strip
feedthrough, filtered RS-
232 serial feedthru, fil-
tered USB1.1 feedthru

Additional connectors available, see options

below.

IS	OL	.ATION
-90dB	@	1GHz
-90dB	@	3GHz
-80dB	@	6GHz
	-90dB -90dB	ISOL -90dB @ -90dB @ -80dB @

DIMENSIONS	COST
23/4"H x 18"W x 12"D	\$1,395.00
3"H x 163/4"W x 101/2"D	. ,
Nom. Inside Dimensions)	

COST

Professional RF Test Solutions Now In Our 35th Year!

RF Shielded Test Enclosures

MODEL STE3300

ST

MODEL

STE3800



STF3300

Designed from the ground up to be functional, fast, and convenient for the design, production, testing, and maintenance of wireless LAN, Bluetooth, and other microwave frequency applications. Durability is assured because the STE3300 is constructed of rugged .090 and .125 aluminum with dual heavy-duty latches.

Unmatched RF isolation is achieved by the use of the two rows of high performance flexible RF gaskets. The entire interior is lined with RF absorbent foam that provides 24dB reflective attenuation to eliminate nulls and hotspots. The inside working space is large enough to test your devices as a complete system or use multiple enclosures to eliminate interference between work stations. A large variety of connector options are available for specific customer applications. All connectors are milled into a removable 304 stainless steel panel to allow for future requirements when neede

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	FEATURES
)	RF absorbent foam liner
	Exclusive double lip RF tight gasket
	Universal I/O connecter interface plate Easy release latch system
	Easy release latch system
	Steady-hold hinge system
	Steady-hold hinge system Designed to test complete systems

E	ed.			
	CONNECTORS	ISOLATION	DIMENSIONS	COST
	None provided	-90dB @ 2GHz	9¾"H x 18"W x 12"D	\$829.00
	standard.	-90dB @ 4GHz	81/4"H x 163/4"W x 103/4"D	
		-80dB @ 6GHz	(Nom. Inside Dimensions)	
	Custom configured,			
	see options below.			

STE3500

Designed specifically for Wireless Communications circuit board production testing where there is a need for a large footprint for isolating oversized boards and minimal height to allow for easy device placement. The lid opens automatically using the internally mounted dual precision air pistons once the dual heavy duty latches are released.

Construction meets the same standards as our popular STE3300 and incorporates the same double gasketed lid to provide the highest attenuation factor at the best value. The I/O panel is located close to the bottom of the rear panel to keep the cabling as close to the device under test as possible. All connectors are milled into a removable 304 stainless steel panel to allow for future requirements when needed.

MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
				9"H x 22"W x 17"D	\$1,095.00
				8½"H x 18¾"W x 15¾"D	
	Universal I/O connecter interface plate		-80dB @ 6GHz	(Nom. Inside Dimensions)	
	Easy release latch system	Custom configured,			
	Dual gas filled cover struts	see options below.			
	 Designed to test complete systems 				

One of our newest RF test enclosures designed for complete laptop integrated WLAN and Blutooth testing. It's large 16" W x 24" D is designed to be either desktop mounted or to be integrated on a standard 19" sliding rack shelf. Dual gas struts provide easy top cover lifting for full top access to insert the largest laptop computer inside for RF isolated tests and measurements. A front handle is included to assist in carrying the STE as well as front rack mount sliding.

Construction meets the same standards as our popular STE3300 and incorporates our exclusive double RF gasketed cover to provide the highest attenuation available. The universal I/O panel is located on the rear of the enclosure to provide easy cabling inside sliding rack mount installations. For full size laptop testing and measurement, the STE3600 has been designed to make your life a lot easier!



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MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
STE3600	 Designed for wide format laptops and other 	None provided	-90dB @ 2GHz	12"H x 17"W x 24"D	\$1,495.00
	large scale wireless equipment	standard.	-90dB @ 4GHz	11"H x 16"W x 23"D	
	RF absorbent foam liner		-80dB @ 6GHz	(Nom. Inside Dimensions)	
	Exclusive double lip RF tight gasket	Custom configured,			
	Universal I/O connecter interface plate	see options below.			
	Easy release latch system				
	Dual gas filled cover struts				
	Dual ventilation or fan forced cooling				

ISOLATION

-90dB @ 2GHz

-90dB @ 4GHz -80dB @ 6GHz

If you are looking for the ultimate enclosure for TDMA, CDMA, AMPS, PCS, GMS, P2T, PDA, and other wireless communications devices the STE3800 is the enclosure for you. The STE3800 is configured with a built-in Ramsey RTF Radiating Test Fixture to give you flawless go/no-go testing with guaranteed repeatability.

It is designed around the STE3300 to give you a whopping 51/2"H x 151/4"W x 91/4"D inside working space. The RTF provides a broadband coupling response from 800 MHz all the way up to 8 GHz. The heavy duty universal clamp system positions and holds the device under test in an exact position that can be easily duplicated for repeatability. Because frequent tests require the operator to visually inspect the device display (cell phone, PCS phone, etc.), the STE3800 features a large RF tight viewing window that overlooks the entire working area. The entire display and any indicators, LED's etc. located on the device can easily be seen throughout the test process!

Double thickness 24dB RF absorbent foam lines the entire work area for a flat response. As with the STE3300, double row RF gaskets are used to provide RF isolation up to -90dB at 4GHz. A Type-N female connector is provided standard for the RTF antenna connection, and is located on the removable 304 stainless steel I/O panel that can be custom configured with any available I/O options.

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No.	

•	Integral RF radiating test fixture (RTF)
	Flat Coupling Factor 800MHz - 8 GHz
•	Provides absolute repeatability testing
•	RF tight illuminated viewing window
	to see device displays and indicators
•	1" RF absorbent foam liner for a flat-

FEATURES

 RF tight illuminated viewing window 	
to see device displays and indicators	
• 1" RF absorbent foam liner for a flat-	
ter response	
 Exclusive double lip RF tight gasket 	
 Universal I/O connecter interface plate 	9

CONNECTORS		
Type-N to built-in RTF		
antenna provided		
standard.		

Additional connectors
available, see options
available, see options below.

DIMENSIONS	COST
12¾"H x 18"W x 12"D	\$1,995.00
51/2"H x 151/4"W x 91/4"D	. ,
(Nom. Inside Dimensions	
Above RTF)	



STE4400

High performance RF test enclosure specifically engineered for the production floor! Designed to the same exacting specifications of the STE3300, the STE4400 offers a unique swing-down front door opening for easy device placement and removal. Easily accommodates a laptop computer to fit any test application.

Extra deep work space accommodates the largest devices. Like the STE3300, your custom I/O configuration is milled into a removable 304 stainless steel panel to allow for future requirements when needed, giving you off the shelf delivery of your custom order!



STE44

STE

DEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
				15½"H x 22½"W x 19"D	\$1,595.00
				141/4"H x 211/4"W x 171/2"D	
	 Universal I/O connector interface plate 		-80dB @ 6GHz	(Nom. Inside Dimensions)	
	 Large hinge-down front door 	Custom configured,			
	 Designed for your own test fixtures 	see options below.			
	,	·			

STE4500

The popularity of the STE4400's larger size along with the patented hands-on manipulability of the STE3000B brought you the STE4500! The exclusive RF tight hands-on silver mesh gloves and illuminated viewing window are integral to the large 22.5"W x 18" H wide front of the enclosure. Dual gas filled struts hold the hinged top open for easy access for the largest devices, including laptops! Like other STE series enclosures, a universal stainless steel I/O connecter interface plate is used to provide you any combinations of "custom" milled connectors and I/O's that you may require. See the options below.

IODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
E4500	 Designed for hands-on manipulation of 	None provided	-90dB @ 2GHz	19"H x 22½"W x 15½"D	\$2,245.00
	larger devices under test	standard.	-90dB @ 4GHz	18"H x 211/4"W x 14"D	. ,
	Exclusive double lip RF tight gasket		-80dB @ 6GHz	(Nom. Inside Dimensions)	
	Universal I/O connector interface plate	Custom configured,			
	 RF tight "hands-on" silver mesh gloves 	see options below.			
	RF tight illuminated viewing window	·			
	Dual gas filled cover struts				

STE5000

The STE5000 enclosure represents a breakthrough in RF shielded enclosure design and value. The enclosure is roomy enough to hold even 19" rack sized instruments and provides -110dB of shielding, enabling one to test anywhere in your facility!

The box is constructed of type 304 stainless steel and lined with microwave absorbent foam. Our unique double lip gasketed closure maintains maximum shielding while allowing a full 24" X 18" opening. Heavy-duty hinges and latches plus interior bracing insures the physical integrity of the enclosure. RF attenuation is -110 dB at 1GHz, and -80dB at 18GHz! A 3.5" x 6" precision machined removable 304 stainless steel panel has been integrated into the design of the enclosure. Also available with our exclusive RF Tight illuminated viewing window in the STE5100.



	MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
1	STE5000	8			19"H x 25"W x 25"D	\$3,495.00
		equipment testing	standard.		17½"H x 23½"W x 23½"D	
1 02		RF absorbent foam liner		-95dB @ 6GHz	(Nom. Inside Dimensions)	
		Exclusive double lip RF tight gasket	Custom configured,	-80dB @ 18GHz		
		Universal I/O connector interface plate	see options below.			
		Large sturdy stainless construction				

The stainless steel STE5000 set records for both equipment compatibility and reliability in a high volume manufacturers environment. Designed to fit the largest equipment inside for rock solid EMI and RF isolated tests and measurements. Built to the same design specifications as the STE5000 above, the STE5100 also includes our exclusive illuminated RF tight viewing window on the front door. Now you can see indicators, displays, and screens on your DUT inside the STE while the tests are underway. Critically important for laptops, wireless terminals, and other devices that must be seen under test.



RF Filtered Data: Power Connections:

Ventilation Options:

Fiber Transceiver:

	MODEL	FEATURES	CONNECTORS	ISOLATION	DIMENSIONS	COST
13	STE5001	RF tight illuminated viewing window	None provided	-110dB @ 1GHz	19"H x 25"W x 25"D	\$3,995.00
_ 43		to see device displays and indicators	standard.	-100dB @ 3GHz	171/2"H x 231/2"W x 231/2"D	
140		Large sturdy stainless construction		-95dB @ 6GHz	(Nom. Inside Dimensions)	
0.00		 Designed for full size and rack mount- 	Custom configured,	-80dB @ 18GHz		
-3		ed equipment testing with visual dis-	see options below.			
		plays				

CUSTOM CONFIGURATION OPTIONS

BNC, TNC, SMA, SMB, UHF, Type-N RF Feedthrough: Fiber optic bulkhead feedthrough Fiber Optic: Dust Covers:

Dust cover caps with security chains available for all RF feedthrough connectors

DB9 (10pf), DB9 (100pF), DB9 (1000pF), DB15 (100pF), DB15 (1000pF), DB25 (1000pF), DB37 (1000pF), RJ45/DB9 Filtered, RJ11/DB9 Filtered, USB/DB9 Filtered

4-Pole filtered power strip, 6-Pole filtered power strip, surge protected power strips

Dual side mounted RF filtered vents with single filtered exhaust muffin fan Provides RF relay to automatically switch circuit to internal load when cover is opened

RF Safety Inhibit Option: RF Absorbent Foam: Standard 1/2" thick RF absorbent foam liner provides 24 dB attenuation. 1" thick foam is standard on the STE3800 and available as an

option to provide a flatter response

S.I. Tech USB 2.0 Fiber Transceiver System available for devices up to 480 Mb/s

Note: RF Isolation specs are measured at 1M with terminated RF feedthrough coaxial connectors installed. Actual isolation & attenuation can be affected by adding additional filtered and non-filtered connectors. Check with Ramsey for specific connector specifications.

AMPS, CDMA, TDMA, PCS, GSM, 3G, RFID, PDA, ZigBee, Bluetooth®, Wibree, 802.11a, b, g, n, WiFi, WiMAX, WLAN, PCMCIA, USB, QNC, P2T, Forensics, Flex®, Reflex®, POCSAG, Golay... YOU NAME IT, WE'VE GOT YOU ISOLATED!