

5600 and 5600 HP Series Test Box



ETS-Lindgren's 5600 and 5600 HP series of RF Test Enclosures are self-contained, portable test cell enclosures designed for testing wireless devices in a development, production, and/or quality assurance environment, from 300 MHz to 18 GHz. Other applications can include 802.11 A, B, G and N devices, Bluetooth, Zigbee, RFID, 5G, IOT, and legacy technologies (2G, 3G, and LTE). These small device test enclosures can help isolate devices under test from outside signal interference allowing users to make reliable and repeatable measurements in a noise free environment. Tabletop and rack mount configurations are available. These test enclosures are available in standard sizes, including two (2) top lid and one (1) 9U box that will fit in a typical 19" equipment rack. These standard offerings enable users to have a superior wireless test box within a few weeks after purchase allowing users to start testing quickly and efficiently.

The 5600 series test cell enclosures are outfitted with ETS-Lindgren microwave absorber lining. Constructed of a graded dielectric material, the absorber is designed to provide absorption at microwave frequencies, thus eliminating unwanted reflection within the RF shielded enclosure. Dual layer doors feature a precision "braid over foam" RF seal installed on the both the lid and top flange of the enclosure; resisting compression sets to more than 50,000 cycles. This design significantly extends the typical working lifespan of the RF seal performance. Passive waveguide ventilation is available on the Model 5604 rack mount enclosure only.

To maximize flexibility during testing, ETS-Lindgren offers five (5) standard preconfigured I/O panel options. Users can conveniently interchange connector panels in the field as needed for new testing requirements. Ethernet (POE) and USB 2.0 filter offerings are designed to maintain signal integrity and minimize RF interference from entering and exiting the enclosure. A DC power option is also available using DB9 (5A max) or with terminal style (20A max) filtered connectors.

Key Features

- Frequency Range: 300 MHz to 18 GHz
- 5600 Series: 80 dB+ of Isolation Shielding Effectiveness Over Frequency Spectrum
 - Planewave at 300 MHz to 3 GHz: 80 dB
 - Planewave at 3 GHz to 6 GHz: 80 dB
 - Planewave at 6 GHz to 18 GHz: 70 dB
- 5600 Series: 100 dB+ of Isolation Shielding Effectiveness Over Frequency Spectrum
 - Planewave at 300 MHz to 3 GHz: 100 dB
 - Planewave at 3 GHz to 6 GHz: 90 dB
 - Planewave at 6 GHz to 18 GHz: 80 dB
- Quick Availability
- Lightweight Tabletop or 19" Rack Mount Available
- Dual Layer Sealed Door with High Performance Braid Over Foam RF Seal with Dual Paddle Latches
- Interchangeable I/O Connector Panels

Product Features

I/O Connector Panels

Multiple preconfigured I/O panel options are available. As these panels are conveniently interchangeable in the field, users can update their existing 5600 test box to meet new testing requirements. Ethernet (POE) and USB 2.0 filter offerings are designed to maintain signal integrity and minimize electromagnetic interference from entering in or leaking out from the enclosure. DC power option is available using DB9 (5A max) or with terminal style (20A max) filtered connectors.

Microwave Absorber

ETS-Lindgren lossy foam moderate performance RF absorber (constructed of a graded dielectric material) provides absorption at microwave frequencies, thus eliminating unwanted reflection within the RF enclosure.

Dual Layer Sealed Door

5600 series test boxes have a precision installed "braid over foam" RF seal on the enclosure's integrated lip channel. This works to resist compression sets to more than 50,000 cycles and extends the lifespan of the RF seal performance.

Durable Construction

Consistent to all ETS-Lindgren product lines, the 5600 series offers lightweight and robust construction, versatile for any wireless testing need.

- Dual layer reinforced door cover and durable hinges with stoppers that prevent bending and warping of the top side geometry (most susceptible area of an RF enclosure)
- High quality nickel fabric over urethane foam core dual gasket door seals
- All metal is conversion coated to maintain conductivity prior to powder coating to minimize oxidation.

Specifications

Physical Specifications

Model	Dimensions
5601 (Tabletop)	30.48 cm L x 45.72 cm W x 20.32 cm H (12 in x 18 in x 8 in)
5601 HP (Tabletop)	35.56 cm L x 50.8 cm W x 25.4 cm H (14 in x 20 in x 10 in)
5602 (Tabletop)	45.72 cm L x 60.96 cm W x 30.48 cm H (18 in x 24 in x 12 in)
5602 HP (Tabletop)	50.8 cm L x 66.04 cm W x 35.56 cm H (20 in x 26 in x 14 in)
5604 (9U Rack Mount)	53.34 cm D x 43.18 cm W x 38.1 cm H (21 in x 17 in x 15 in)
5604 HP (9U Rack Mount)	58.42 cm D x 48.26 cm W x 43.18 cm H (23 in x 19 in x 17 in)

Note: The 9U Rack Mount box includes passive air ventilation with an externally mounted 110 VAC exhaust fan with power cord.

	5601 (Tabletop) 12"W x 18"L x 8"H	5602 (Tabletop) 18"W x 24"L x 12"H	5604 (9U Rack Mount) 21"D x 17"W x 15"H
Panel - A	2 ea SMA 1 ea DB9 D-Sub	2 ea SMA 1 ea DB9 D-Sub	2 ea SMA 1 ea DB9 D-Sub
Panel - B	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet
Panel - C	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea DC Power	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea DC Power	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea DC Power
Panel - D	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface
Panel - E	8 ea SMA Connectors 2 ea N 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	8 ea SMA Connectors 2 ea N 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	8 ea SMA Connectors 2 ea N 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface

NOTE: Although I/O panels are interchangeable, only one (1) I/O panel may be mounted to a box at one time. Please contact your ETS-Lindgren representative for custom configurations.

Electrical Specifications

5600 Series	
Frequency Range	Typical RF Isolation
300 MHz to 3 GHz	80 dB
3 GHz to 6 GHz	80 dB
6 GHz to 18 GHz	70 dB

5600 HP Series	
Frequency Range	Typical RF Isolation
300 MHz to 3 GHz	100 dB
3 GHz to 6 GHz	90 dB
6 GHz to 18 GHz	80 dB

Product Options

I/O Connector Panel Options:

Panel A - 1634573	Panel B - 1634574	Panel C - 1634575	Panel D - 1634576	Panel E - 1634577
2 ea SMA Connectors	2 ea SMA Connectors	2 ea SMA Connectors	2 ea SMA Connectors	8 ea SMA Connectors
1 ea DB9 D-Sub	1 ea DB9 D-Sub	1 ea DB9 D-Sub	1 ea DB9 D-Sub	2 ea N
	1 ea USB 2.0	1 ea USB 2.0	1 ea USB 2.0	1 ea USB 2.0
	1 ea Ethernet	1 ea Ethernet	1 ea Ethernet	1 ea Ethernet
	1 ea Ethernet	1 ea DC Power	1 ea AC Power Interface	1 ea AC Power Interface

NOTE: Although I/O panels are interchangeable, only one (1) I/O panel may be mounted to a box at one time. Please contact your ETS-Lindgren representative for custom configurations.

Product Configuration

Pre-Configured Test Box Models:

	5601 (Tabletop)	5602 (Tabletop)	5604 (9U Rack Mount)
	12"W x 18"L x 8"H	18"W x 24"L x 12"H	21"D x 17"W x 15"H
Panel - A	2 ea SMA 1 ea DB9 D-Sub	2 ea SMA 1 ea DB9 D-Sub	2 ea SMA 1 ea DB9 D-Sub
Panel - B	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet

Panel - C	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea DC Power	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea DC Power	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea DC Power
Panel - D	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	2 ea SMA Connectors 1 ea DB9 D-Sub 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface
Panel - E	8 ea SMA Connectors 2 ea N 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	8 ea SMA Connectors 2 ea N 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface	8 ea SMA Connectors 2 ea N 1 ea USB 2.0 1 ea Ethernet 1 ea AC Power Interface