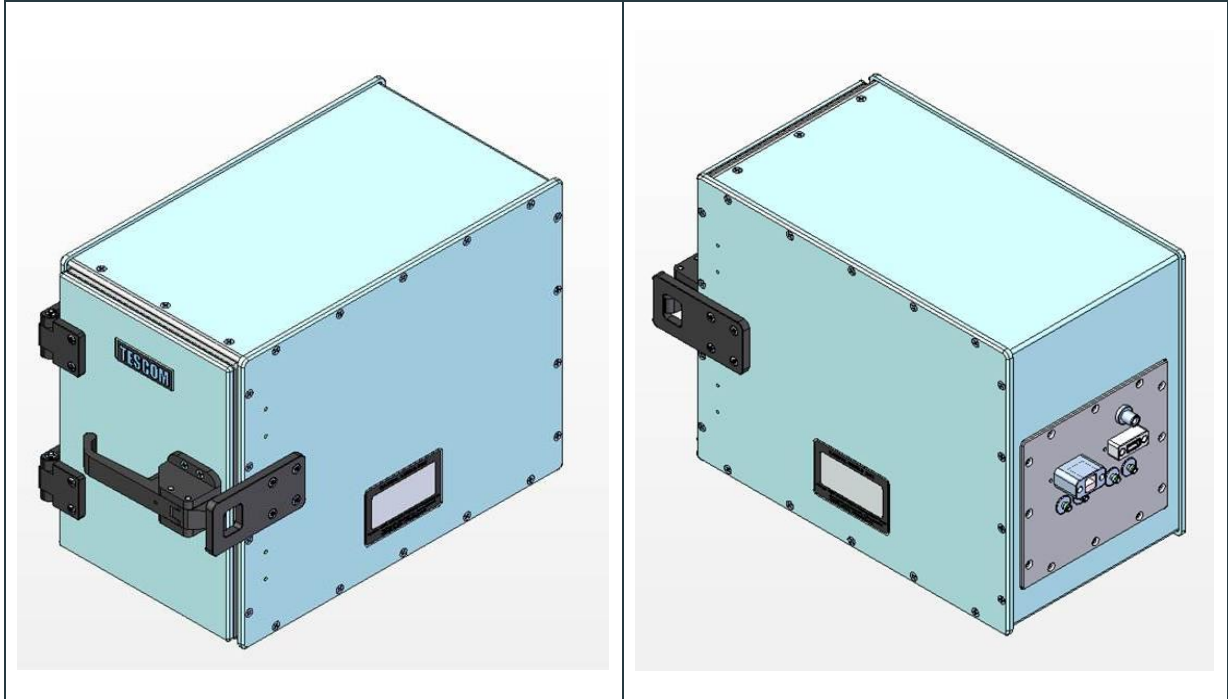




Concentric Technology Solutions Inc

Testing Solutions for the Wireless Industry

TC-5510A mmWave Shield Box



Features

- Reliable High RF shielding from 0.1 GHz to 67 GHz
- Specifically designed for testing in millimeter wave band
- Easy Opening/Closing (Manual Type Box)
- RF Absorber installed materials for stable repeatable measurements
- EMI filters on all data ports and power lines



Specifications

Mechanical Specifications

Dimensions

Inside	170(W) x 312(D) x 240(H) mm
Outside	217(W) x 396(D) x 282(H) mm
Door Size	163(W) x 238(H) mm
Weight	Approx. 9 kg
*Packing	
Size	370(W) x 510(D) x 400(H) mm
Weight	Approx. 11 kg

*The size or weight of a package may vary depending on how the product is packed.

Typical RF Shielding

The shielding effectiveness below is measured with blank panels installed; other I/O interface panels may result in different shielding effectiveness.

Frequency Range	Shielding Effectiveness [dB]
0.1 GHz to 30 GHz	> 60 dB
30 GHz to 67 GHz	> 60 dB

Absorber Reflectivity

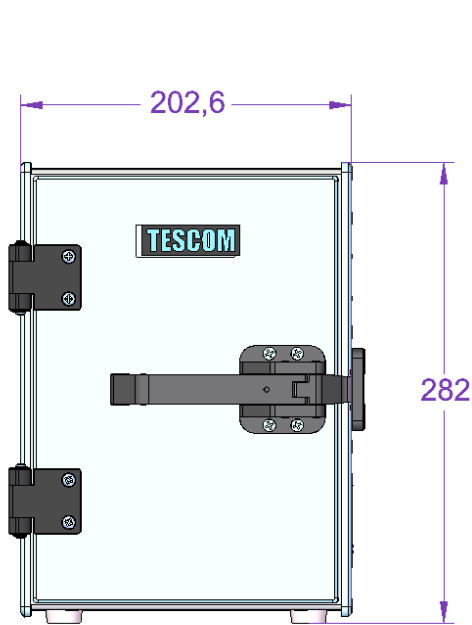
Referring to a metal plate (0 dB @ 0.5 GHz to 67 GHz), signal reduction is measured with the RF absorber inserted.

Frequency Range	Reflectivity (Typ.) [dB]
0.5 GHz to 3 GHz	3 dB
6 GHz to 12 GHz	10 dB
12 GHz to 67 GHz	15 dB

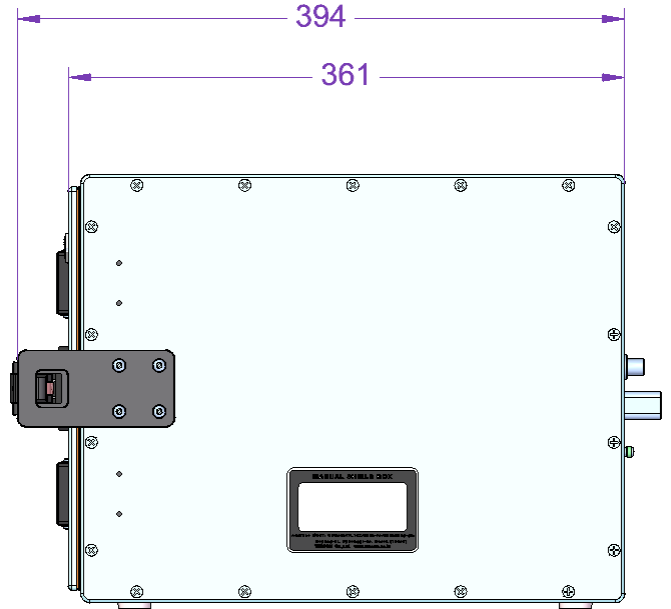


Dimensions

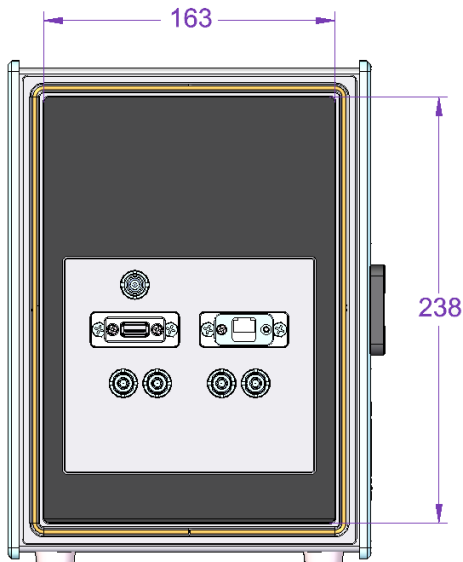
- TC-5510A Outer Dimensions (WxDxH): 217(W) x 396(D) x 282(H) mm



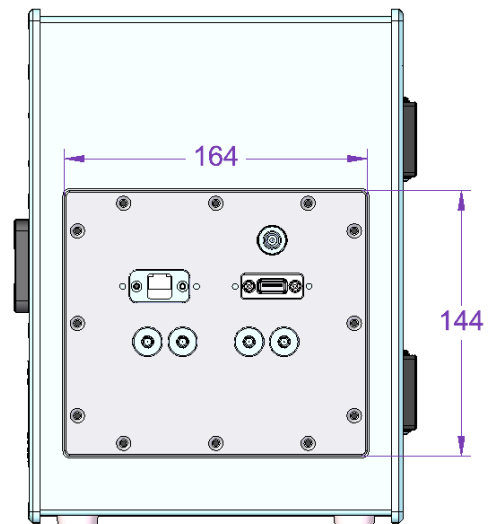
Front View



Side View (Closed)



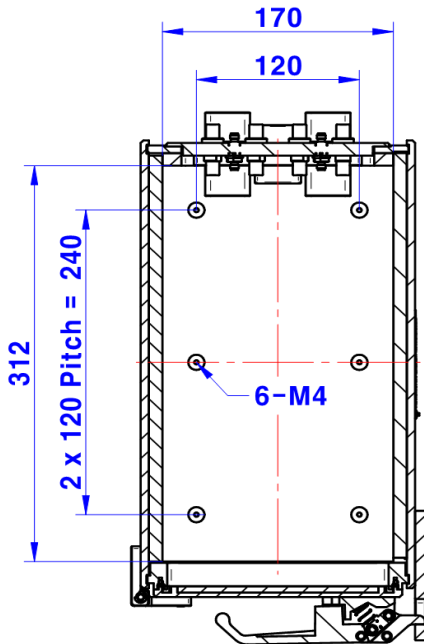
Door View



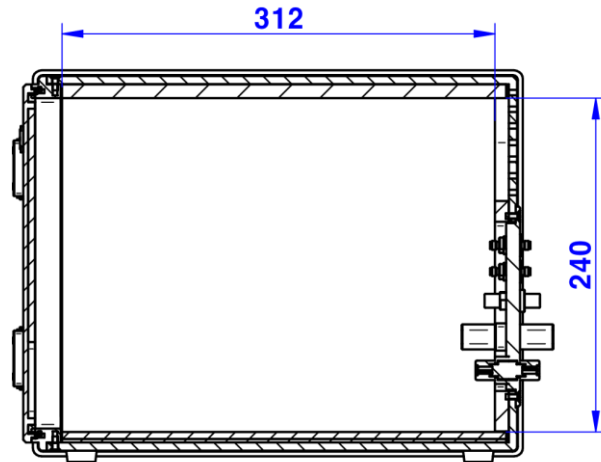
Rear View



- TC-5510A Inner Dimensions (WxDxH): 170(W) x 312(D) x 240(H)



Bottom Inner View

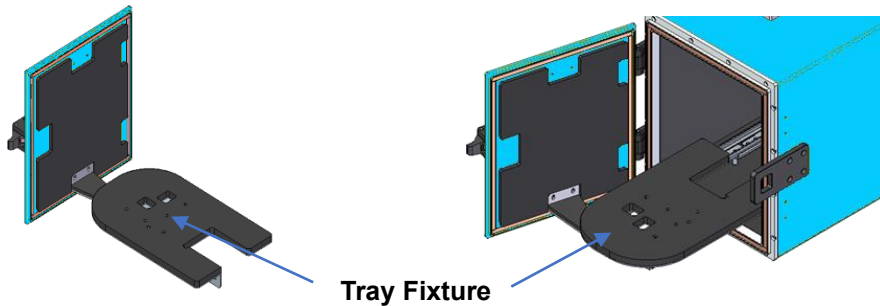


Side Inner View

Ordering Information

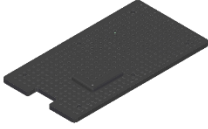
Order Number	Description
	mmWave Shield Box (includes accessories below)
TC-5510A	<ul style="list-style-type: none"> • Base unit configuration options <ul style="list-style-type: none"> - A5510A-00 : Standard Version - A5510A-01 : Tray Fixture Version • Includes accessories below <ul style="list-style-type: none"> - Test Report

■ Tray Fixture Version (A5510A-01)



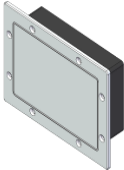


■ **Optional Fixture**

Fixture	Order Number	Description
	TBD	• Bottom Grid Fixture

Optional I/O Interface Panel

■ **Pre-Configured I/O Interface Panel**

I/O Interface Panel	Order Number	Configuration
	M5510A01A	Blank Panel (with absorber)

■ **Custom RF Connector Panel**

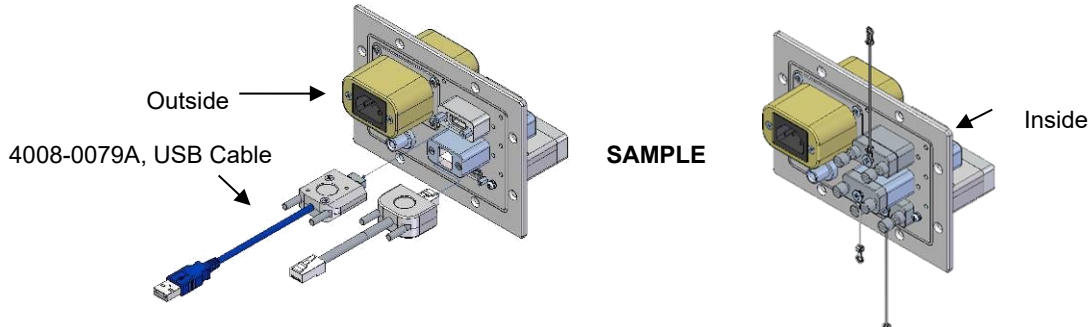
- Custom RF Connector Panels are available by selecting or combining the RF Connectors below.







RF Connector	Description / Order Number	Frequency Range / Impedance / V.S.W.R
	RF, 2.92 mm Thru Adapter / 3407-0024	From DC to 40 GHz, 50 Ω, 1.3 max
	RF, 2.4 mm Thru Adapter / 3407-0027	From DC to 50 GHz, 50 Ω, 1.3 max
	RF, 1.85 Thru Adapter / 3412-0001	From DC to 67 GHz, 50 Ω, 1.5 max
	RF, N-SMA Connector / 3408-0038	From DC to 6 GHz / 50 Ω / 1.15 max
	RF, SMA-SMA Connector / 3408-0039	From DC to 8 GHz / 50 Ω / 1.15 max



■ Custom I/O Interface Panel

- Customized I/O Interface Panels are available by selecting below I/O interfaces below..
Please contact the CTS sales team.



I/O Interface	Description / Order Number	Typical Data Rate / Line Voltage	Typical Shielding ^(*)
	USB 2.0 Filter / 3409-0018A-3 ^(a)	480 Mbps / 5 V, 500 mA / Max Current: 5 A	>60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz >70 dB from 6 to 67 GHz
	USB 3.1 Gen 1 Filter (Active) / 3409-0042A-2 ^(a)	5000 Mbps / 5 V, 600 mA / Max Current: 1.5 A	>80 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >75 dB from 3 to 6 GHz >55 dB from 6 to 67 GHz
	RJ-45 Filter / 3904-0296A	RJ45 Filter: 1 Gbit/s Copper Line Ethernet (1000 BASE-T)	>60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz >60 dB from 6 to 67 GHz
	DC Power Adaptor / 3406-0004A	50 VDC, 3 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >80 dB from 3 to 6 GHz >70 dB from 6 to 67 GHz
	DC Power Adaptor (Banana Jack Type) 3406-0005A-1 (Black) 3406-0006A-1 (White)	50 VAC, 10 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >80 dB from 3 to 6 GHz >70 dB from 6 to 67 GHz
	AC Power Adaptor / 3103-0009A	250 VAC, 7 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >80 dB from 3 to 6 GHz >70 dB from 6 to 67 GHz

- ^(a) : Exclusive cables should be used.
(USB Cable, 4008-0079A, 2 M, USB 3.0 A(M) - USB 3.0 A(M), Housing: Aluminum)
- ***Typical Shielding** is an estimated value with I/O interface installed.
- The data above were measured by TESCOM standards, and they may be different depending on the measuring method and environment.
- Each shielding effectiveness is measured without any cable, so it will be likely affected when a cable is connected. Also, it may vary depending on the type of cable.