



Concentric Technology Solutions Inc

Solutions for the Wireless Industry

TC-5810A  **TESCOM**
WIRELESS

RF & Audio Shield Box

Data Sheet



Features

- Reliable High RF Shielding up to 6 GHz
- High Performance RF & Audio Multi-Absorber
- Specifically designed for various types of Large Device
- EMI filters on all Data ports
- Easy Opening/Closing of Door
- Customizable Data connections

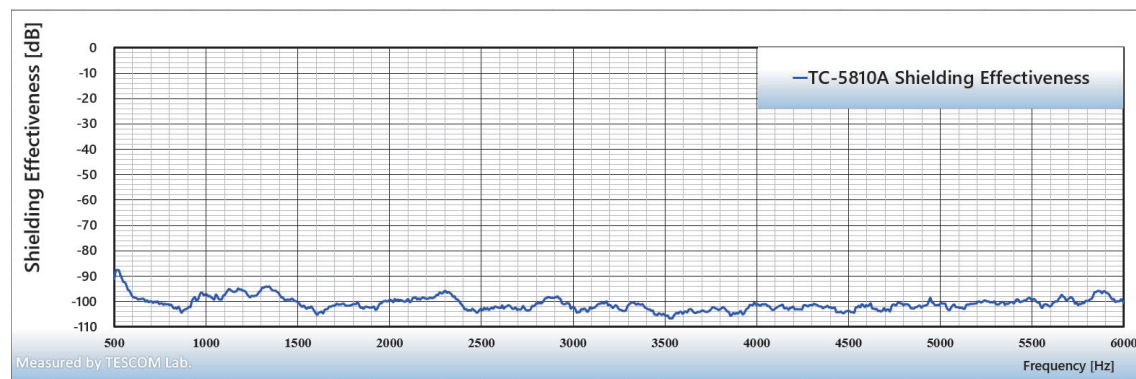
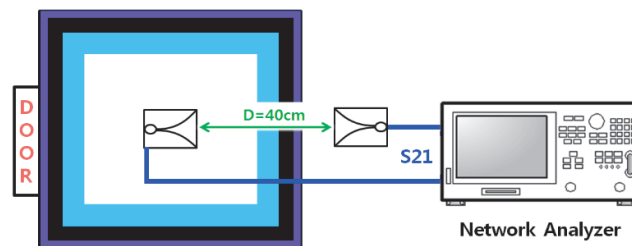
Mechanical Specifications

RF Connectors without module	Two (2) N (f) outside and SMA (f) inside
Dimensions	
Inside	445(W)x 547(D)x 445(H) mm
Outside	690(W)x 856(D)x 768(H) mm
Door	439 (W)x 439(H) mm
Weight	90 kg
*Packing	
Size	896(W)x 1016(D)x 876(H) mm
Weight	Approx. 105 kg

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

Typical RF Shielding

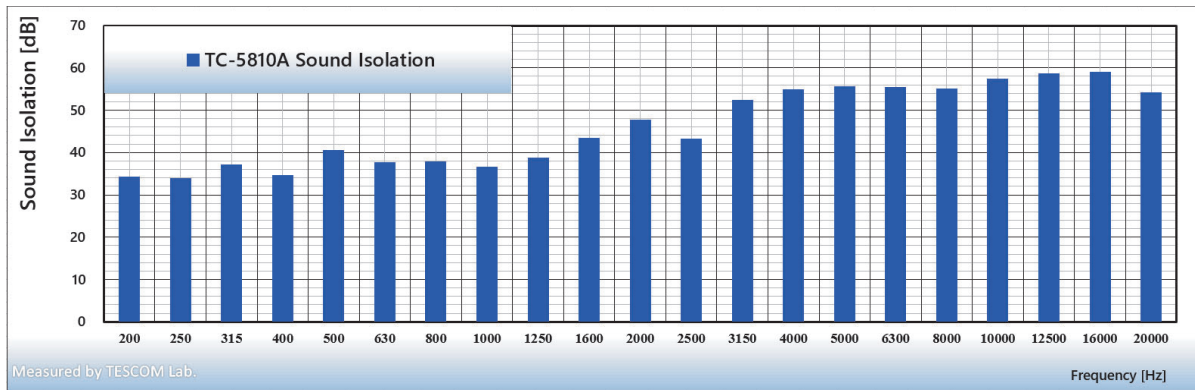
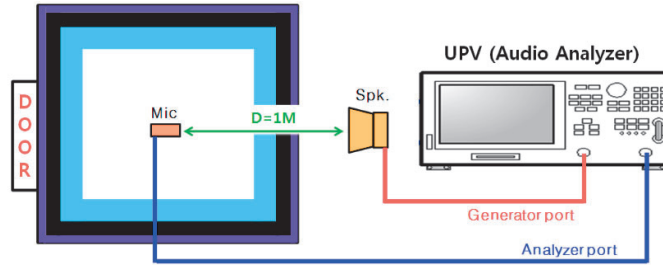
The shield effectiveness below is measured when the blank panel is mounted; other I/O interface panel results a different shielding effectiveness of the shield box.



Frequency	Shielding effectiveness [dB]
100 to 2000 MHz	> 70 dB
2000 to 3000 MHz	> 70 dB
3000 to 6000 MHz	> 70 dB

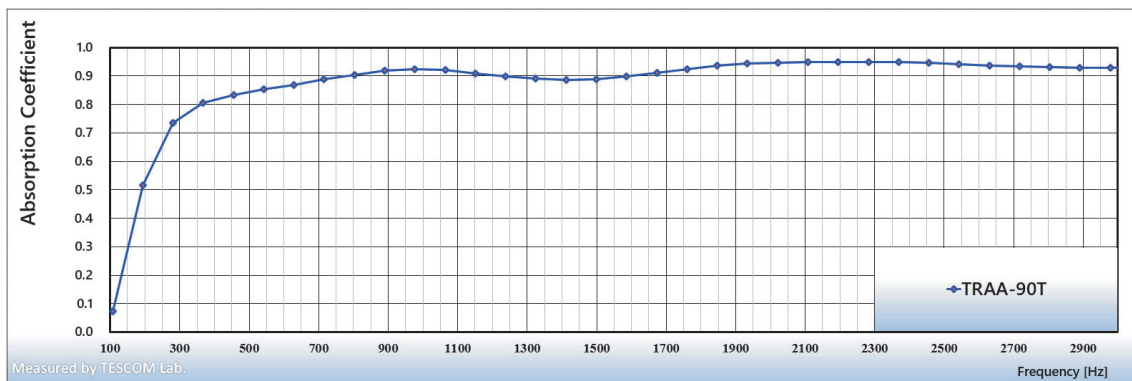
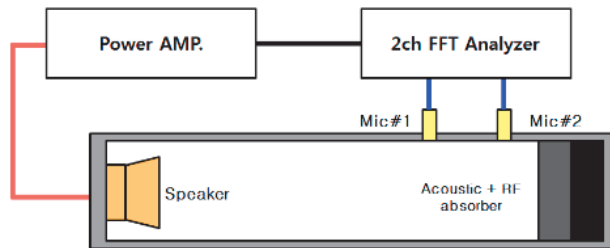
Typical Sound Isolation

The sound isolation below is measured when the blank panel is mounted.



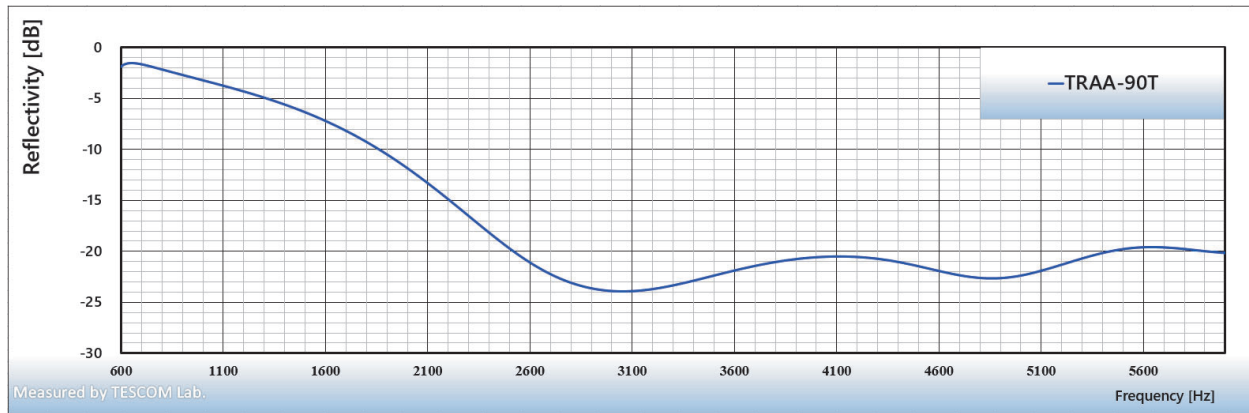
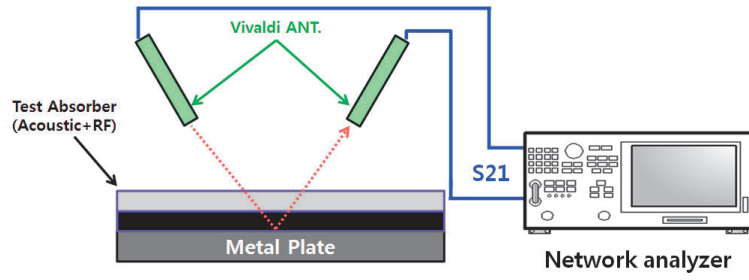
Audio Absorption Performance

(ISO 10534-2: Impedance Tube Method)



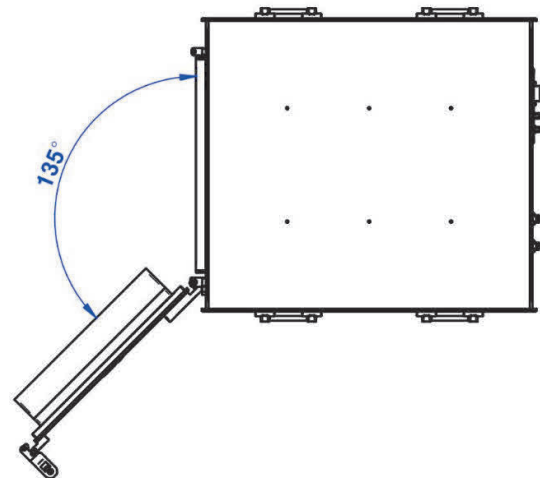
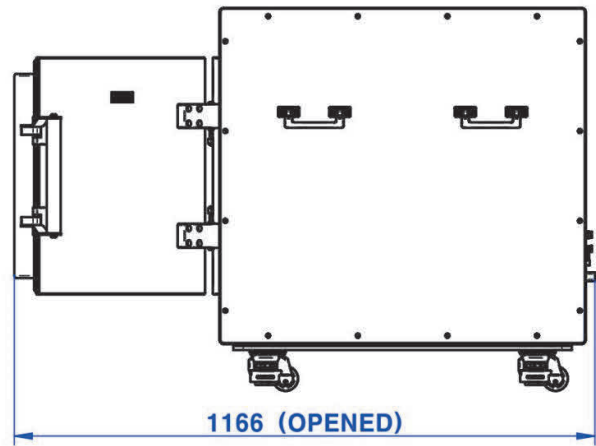
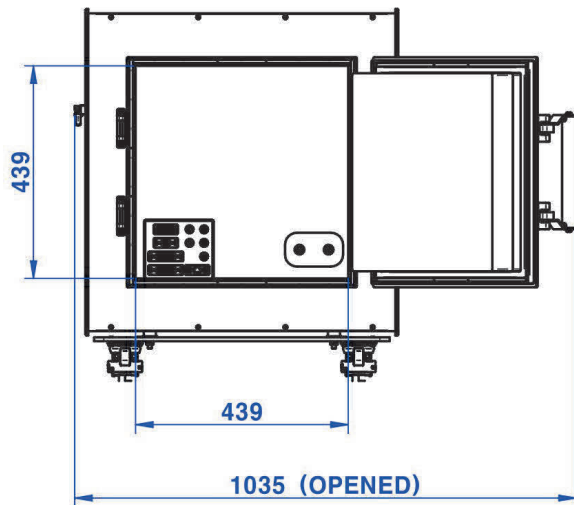
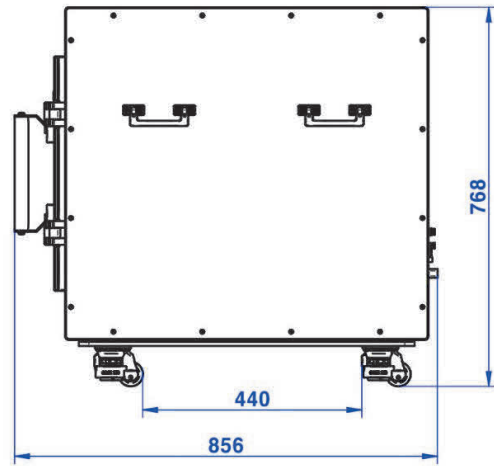
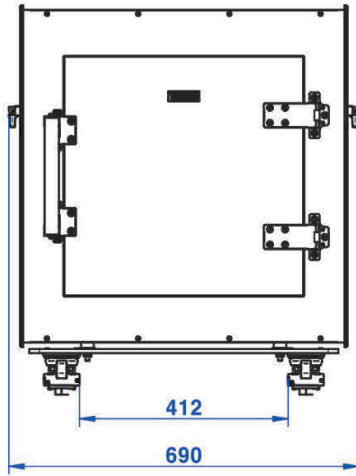
RF Absorber Performance

(NRL Arch Method)



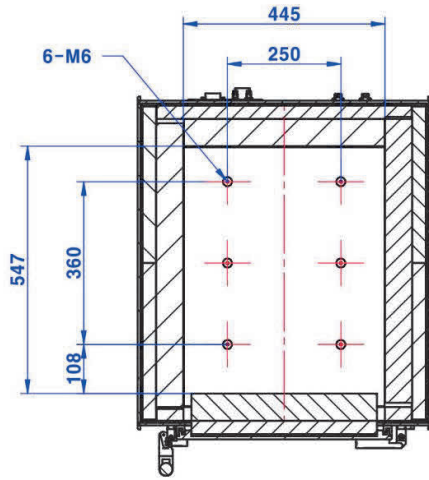
Outer Dimensions

TC-5810A Outside Dimensions: 690 (W) x 856 (D) x 768 (H) mm

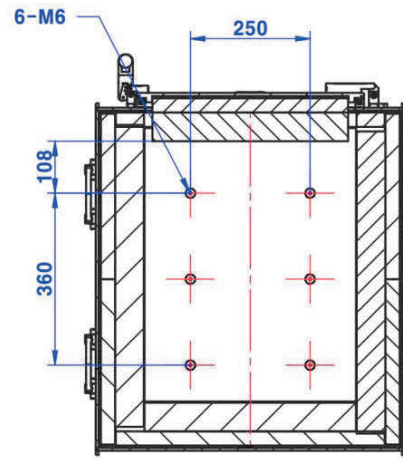


Inner Dimensions

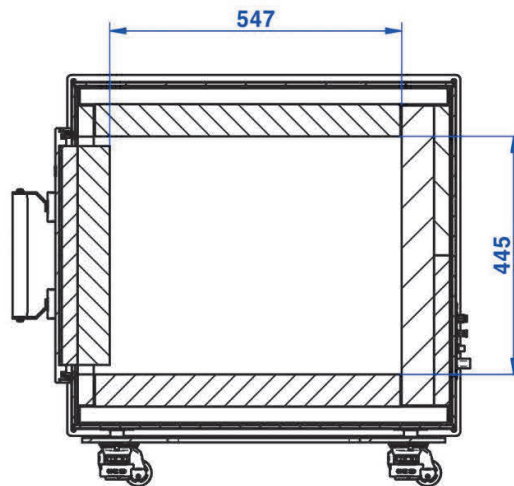
TC-5810A Inside Dimensions : 445(W) x 547(D) x 445(H) mm



Bottom Inner View



Top Inner View



Side Inner View

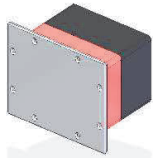
Ordering Information

Order Number	Description
TC-5810A	RF & Audio Shield Box (including accessories below) Test Report SS-402, N(m) - N(m), 1 m, 1 pc RG58, BNC (m) to BNC (m) cable 1 m, 1 pc (for customer delivery)

*Depending on the voltage standard of each country, ventilation fans and cables can be changed.

I/O Interface Panels

I/O Interface Panel	Order Number	Configuration
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Data Interface Panel

M5810A01A

Blank Module (Acoustic & RF Absorber + Rubber Sheet)

Custom I/O Interface Panels

I/O Filters	Code	Description	*Typical Shielding
	3409-0009-1 DB25, 1000pF pi Filter	3 Mbps / 100 VDC 5 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz
	3409-0014-1 DB25, 100pF pi Filter	10 Mbps / 100 VDC 5 Amps max	>50 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >60 dB from 3 to 6 GHz
	3409-0008-1 DB9, 1000pF pi Filter	3 Mbps / 100 VDC 5 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz
	3409-0010-1 DB9, 100pF pi Filter	10 Mbps / 100 VDC 5 Amps max	>50 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >60 dB from 3 to 6 GHz
	3409-0018A-3 USB 2.0 Filter	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
	3409-0042A-2 USB 3.0 Filter (Active)	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
	3409-0046A USB 3.2 Gen 2 Type C Adapter (Active)	10 Gbps / 4 - 22V Max Current: 5 A	>70 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz
	3904-0296A RJ-45 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
	3406-0004A DC Power Adaptor	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
	3406-0005A (Black) 3406-0006A (White) DC Power Adaptor (Banana Jack Type)	50 VDC 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
	3103-0009A AC Power Adaptor	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
	3408-0038 RF, N-SMA Connector	From DC to 6 GHz 50 Ω / 1.15 max	N/A
	408-0039 RF, SMA-SMA Connector	From DC to 8 GHz 50 Ω / 1.15 max	N/A