

# TC-5970D Shield Box



## Features

- High RF Shielding
- Easy Opening/Closing of lid
- EMI filters on all Data and DC lines
- Customizable Data connections
- Door safety function when the door opens and closed
- High performance absorber for radiation testing

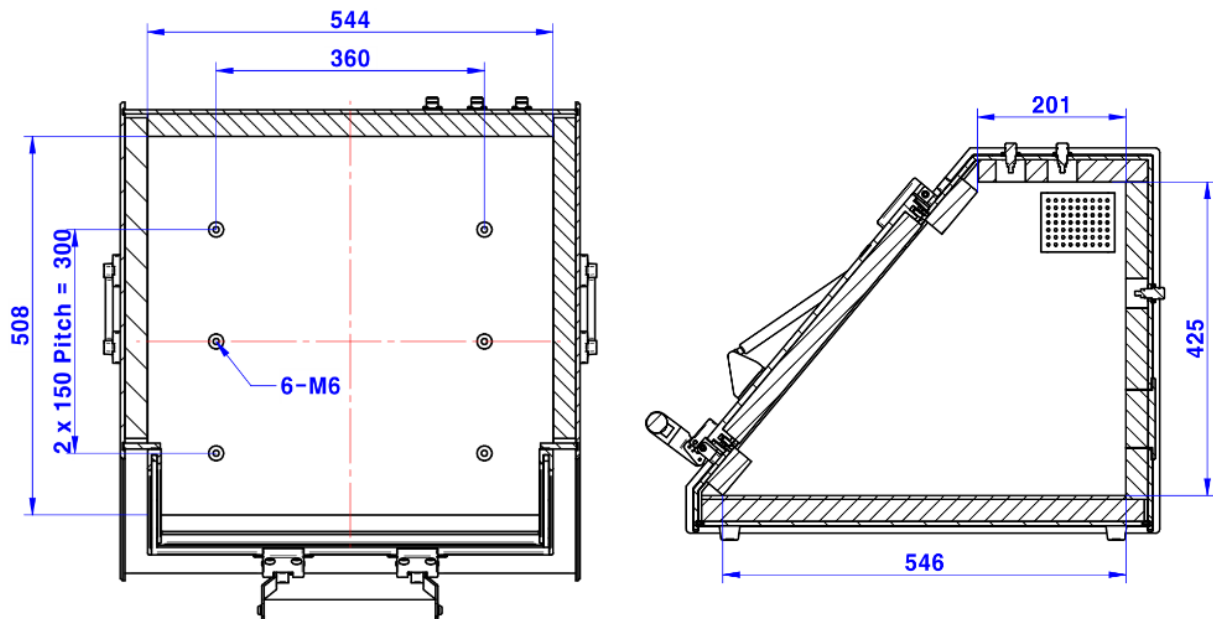
## Specifications

### Mechanical Specification

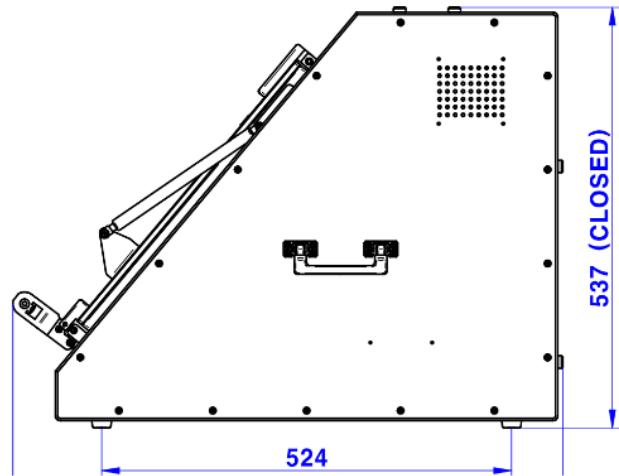
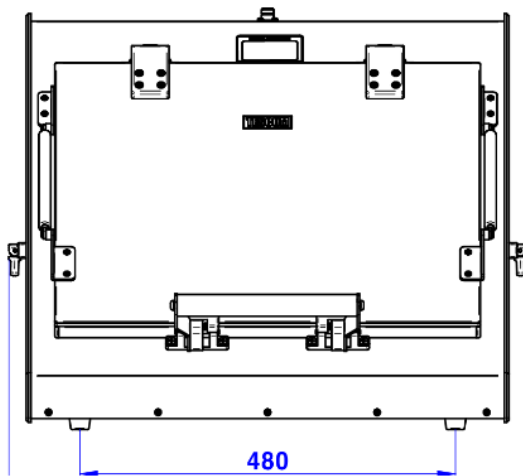
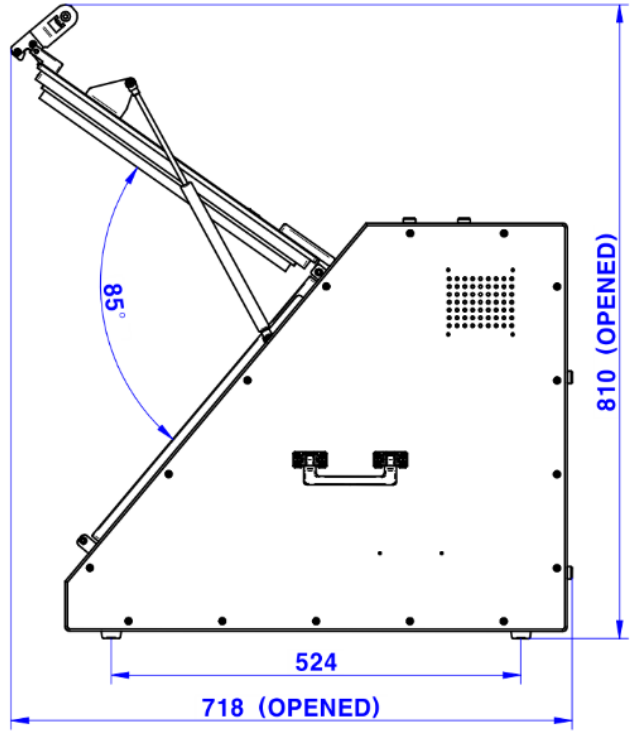
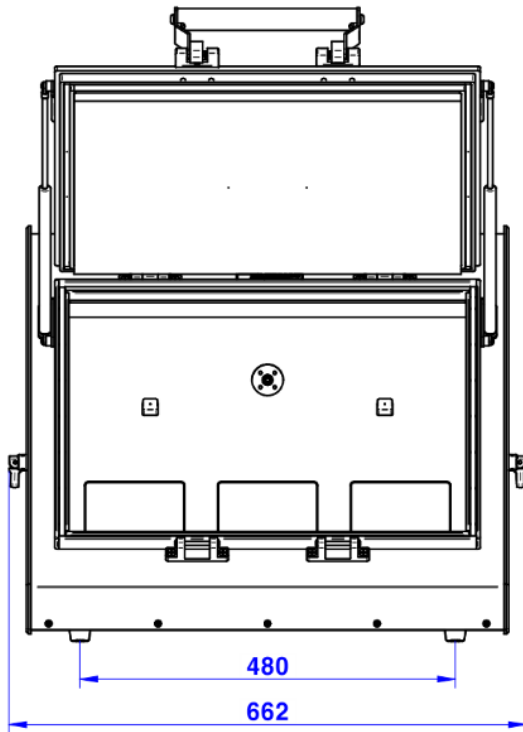
<b>RF Connectors without I/O interface panel</b>	
	six(6) N(f) outside and SMA(f) inside
<b>Dimension</b>	
Inside	544(W) x 546(D) x 425(H) mm, 201(D) mm Top side
Outside	662(W) x 703(D) x 537(H) mm, lid closed. 810(H) mm, lid open.
<b>Weight</b>	
TC-5970D	approx. 38 kg
<b>*Packing</b>	
Size	860(W) x 830(D) x 680(H) mm
Weight	approx. 54 kg
*The size or weight of a package may vary on how to pack a package.	

### Dimensions

#### TC-5970D Inner Dimension



■ TC-5970D Outer Dimension



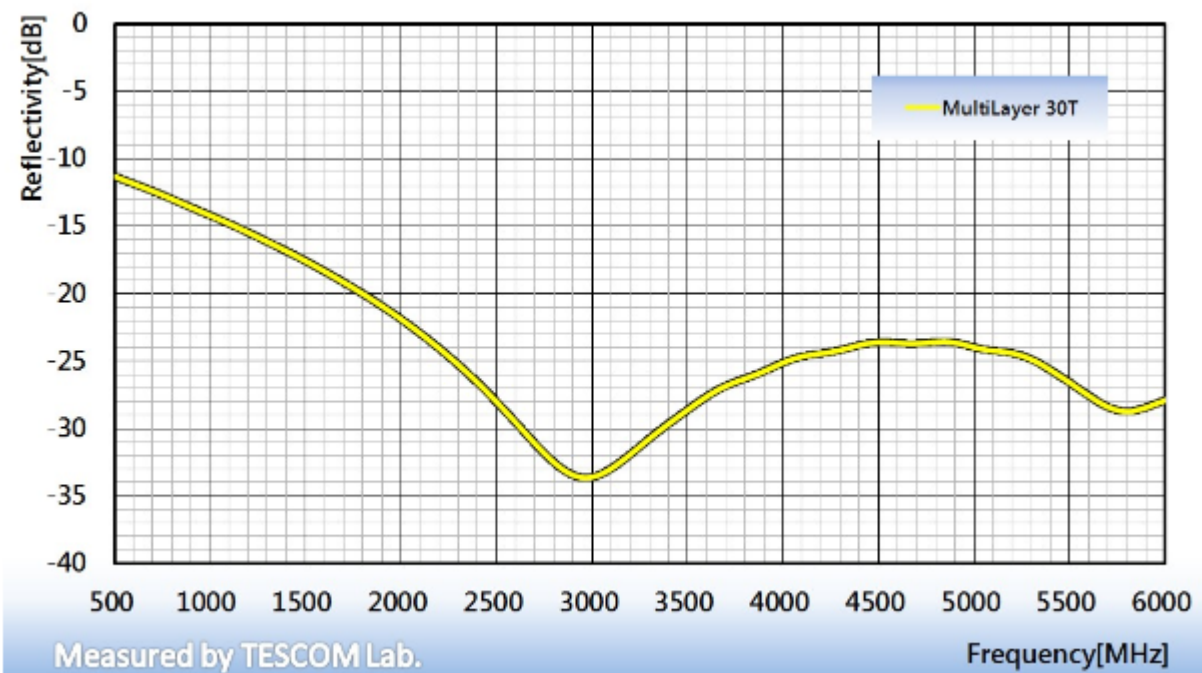
## Typical RF Shielding

- The shielding 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	> 60 dB

## Absorber Reflectivity


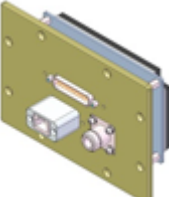
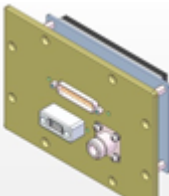
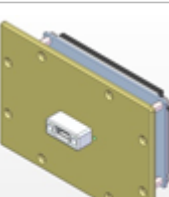
- Measured the reflected signal from the absorber with metal plate using the VNA.



## Ordering Information

Order Number	Description
TC-5970D	<b>Shield Box (including accessories below)</b> Test Report RF Cable, RG-400S, N(m) to N(m) 1 m, 1 pc





### Pre-Configured I/O Interface Panel

I/O Interface Panel	Order Number	Configuration
 Blank Panel	M5970D01A	<ul style="list-style-type: none"> <li>Blank module (Absorber)</li> </ul>
 Data Interface Panel	M5970C03A	<ul style="list-style-type: none"> <li>one(1) N(f) outside and SMA(f) inside</li> <li>one(1) RJ-45 outside and inside</li> <li>one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter</li> </ul>
 Data Interface Panel	M5970C04A	<ul style="list-style-type: none"> <li>one(1) N(f) outside and SMA(f) inside</li> <li>one(1) USB 2.0 outside and inside</li> <li>one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter</li> </ul>
 Data Interface Panel	M5970C08A	<ul style="list-style-type: none"> <li>one(1) USB 2.0 outside and inside</li> </ul>

## Custom I/O Interface Panel

- Customized I/O Interface panels are available. Please contact Tescom sales team or your local distributor.

I/O Interface	Order Number	Typical Data Rate / Line Voltage	*Typical Shielding
 DB37, 1000pF pi Filter	3409-0012-1	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
 DB25, 1000pF pi Filter	3409-0009-1	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
 DB25, 100pF pi Filter	3409-0014-1	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
 DB9, 1000pF pi Filter	3409-0008-1	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
 DB9, 100pF pi Filter	3409-0010-1	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
 USB 2.0 Filter	3409-0018A-3	480 Mbps / 5 V, 500 mA / Max Current: 5A	>60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz
 USB 3.0 Filter(Active)	3409-0042A-1	5000 Mbps / 5 V, 900 mA / Max Current: 1.5 A	>70 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 RJ-45 Filter	3409-0022A	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
 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

I/O Interface	Order Number	Typical Data Rate / Line Voltage	*Typical Shielding
 DC Power Adaptor, Banana Jack Type	3406-0005A 3406-0006A	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
 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
 RF, N-SMA Connector	3408-0038		>60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz
 RF, SMA-SMA Connector	3408-0039		>60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz

- Each shielding effectiveness is measured when each I/O interface panel, which is shown above, is mounted.
- Above data was measured by Tescom, The Shielding Effectiveness might be different based on the measuring method and condition.
- This data has been measured under the condition that the cables are not connected to each filters. When the cables are connected it can affect the shielding performance.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE