

TC-5972D 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

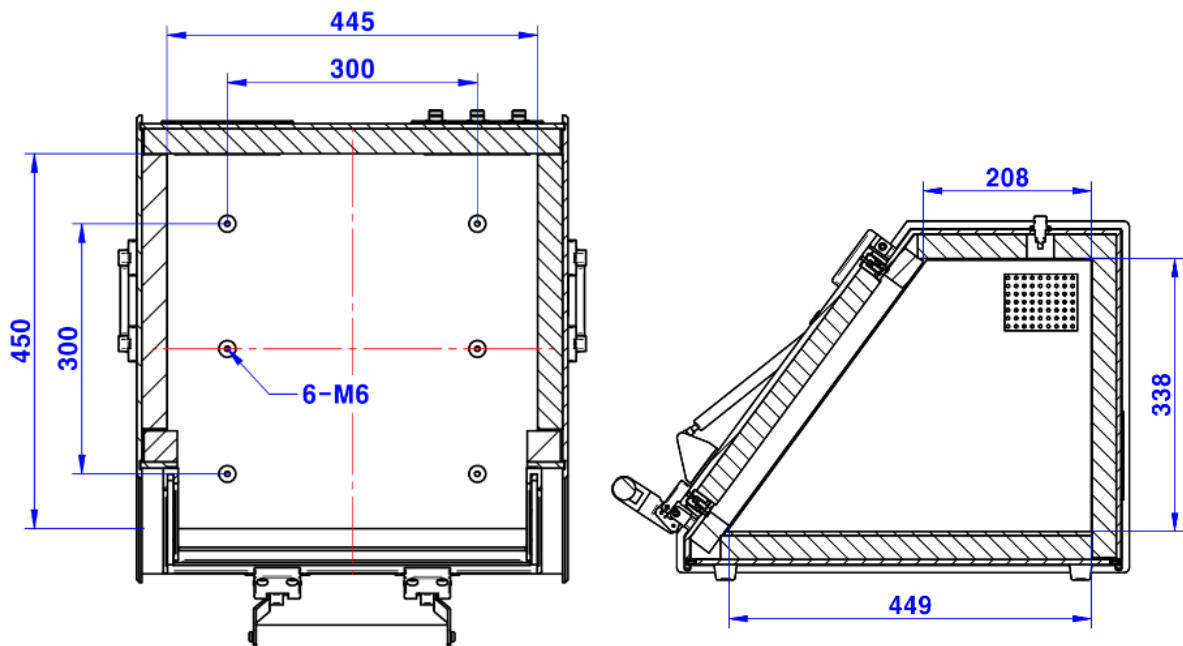
Specifications

Mechanical Specification

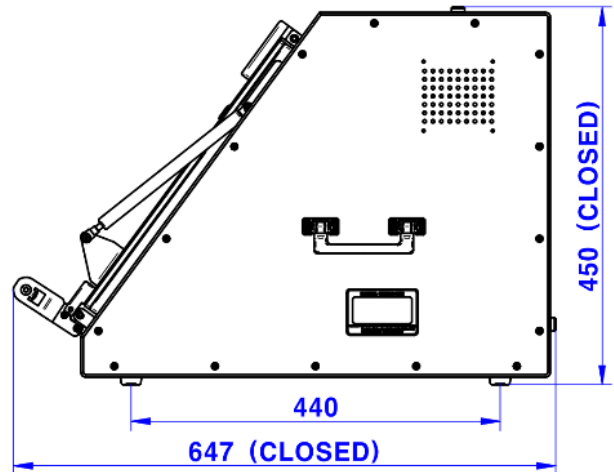
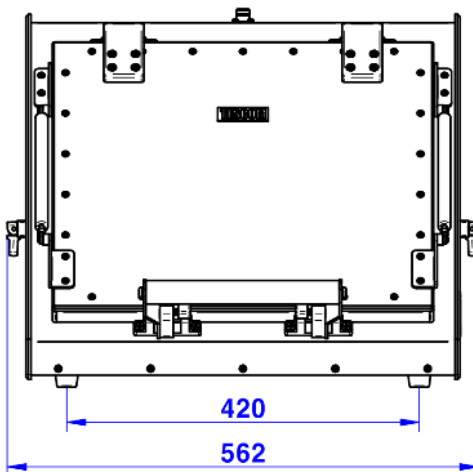
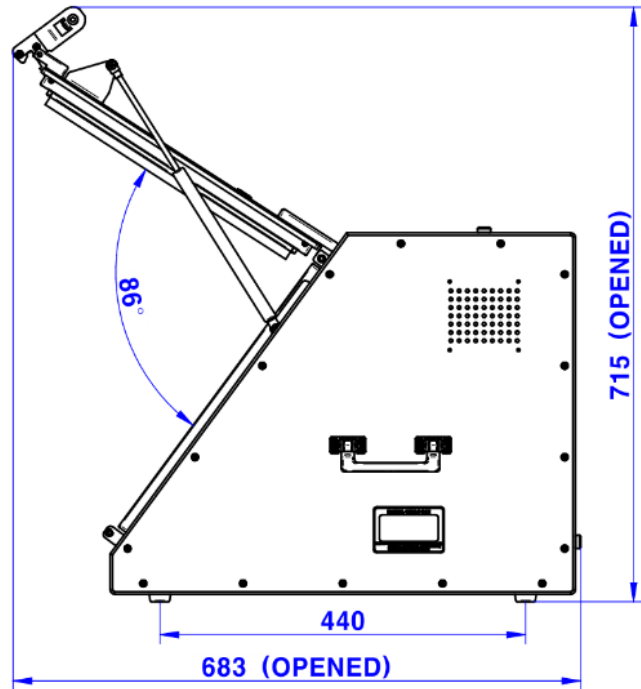
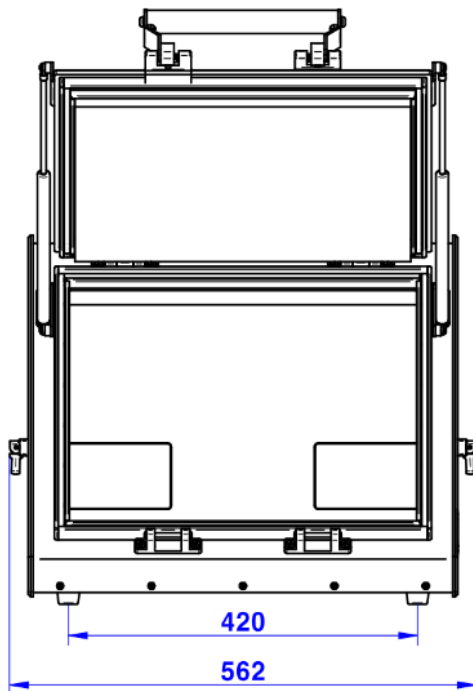
| | |
|---|---|
| RF Connectors without I/O interface panel | |
| | four(4) N(f) outside and SMA(f) inside |
| Dimension | |
| Inside | 445(W) x 450(D) x 338(H) mm, 208(D) mm Top side |
| Outside | 562(W) x 647(D) x 450(H) mm, lid closed. 715(H) mm, lid open. |
| Weight | |
| TC-5972D | approx. 28 kg |
| *Packing | |
| Size | 620(W) x 800(D) x 530(H) mm |
| Weight | approx. 36 kg |
| *The size or weight of a package may vary on how to pack a package. | |

Dimensions

TC-5972D Inner Dimension



■ TC-5972D Outer Dimension



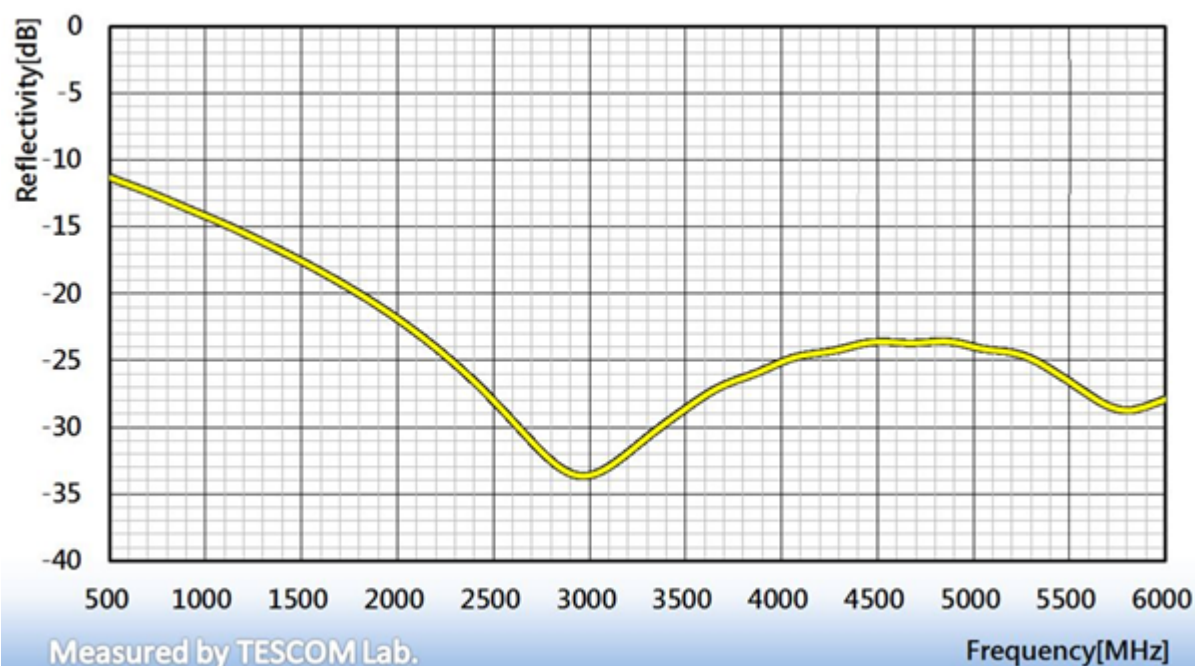
Typical RF Shielding

- 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


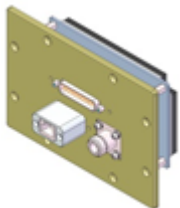
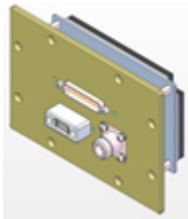
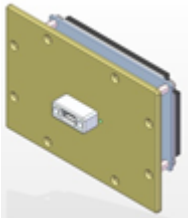
- Measured the reflected signal from the absorber with metal plate using the VNA.



Ordering Information

| Order Number | Description |
|--------------|---|
| TC-5972D | Shield Box (including accessories below) |
| | 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 |
|---|--------------|--|
|  <p>Blank Panel</p> | M5970D01A | <ul style="list-style-type: none"> Blank module (Absorber) |
|  <p>Data Interface Panel</p> | M5970C03A | <ul style="list-style-type: none"> one(1) N(f) outside and SMA(f) inside one(1) RJ-45 outside and inside one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter |
|  <p>Data Interface Panel</p> | M5970C04A | <ul style="list-style-type: none"> one(1) N(f) outside and SMA(f) inside one(1) USB 2.0 outside and inside one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter |
|  <p>Data Interface Panel</p> | M5970C08A | <ul style="list-style-type: none"> one(1) USB 2.0 outside and inside |

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