

# **Concentric Technology Solutions Inc**

Testing Solutions for the Wireless Industry

# TC-5952C Pneumatic Shield Box





#### **Features**

- High RF Shielding
- Pneumatic control of lid open-close and optional test fixture motions
- EMI filters on all Data and DC lines
- Easily customizable to meet various test needs
- RS-232C Remote Control
- Red and Green LED's for Pass/Fail indication
- Dual pressure control and Lid Down Sensor for safety
- Narrower side front
- Provide shield protective cover for safety.
- The custom fixture option, F59421A/B allows auto connection, so it is efficient for mass production.
- CE compliant : EN 292-1:1991, EN 292-2:1991/A1:1995, EN 983:1996, EN 1050:1996, EN 60204-1:1997



TESCOM TC-5952C Pneumatic Shield Box Data Sheet

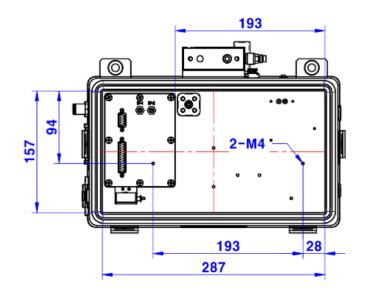
## **Specifications**

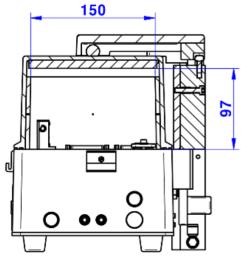
## **Mechanical Specifications**

| Line voltage  |  |  |  |  |
|---|--|--|--|--|
|   | 100 - 240 VAC, 50/60 Hz, 15 watt max.                        |  |  |  |
| Remote control  |  |  |  |  |
|   | RS-232C, 3 wire, DB9(p)                                      |  |  |  |
| Air connection  |  |  |  |  |
| Main connector  | 6 mm OD hose, one-touch push-on fitting                      |  |  |  |
| Fixture control connector   | 4 mm OD hose, one-touch push-on fitting                      |  |  |  |
| Input air pressure  | 5 to 10 bar  |  |  |  |
| Dimension   |  |  |  |  |
| Inside  | 287(W) x 150(D) x 97(H) mm                                   |  |  |  |
| Outside   | 351(W) x 247(D) x 261(H) mm, lid closed. 410(H) mm, lid open |  |  |  |
| Weight  |  |  |  |  |
|   | approx. 13 kg  |  |  |  |
| *Packing  |  |  |  |  |
| Size  | 515(W) x 360(D) x 397(H) mm                                  |  |  |  |
| Weight  | approx. 15 kg  |  |  |  |
| *The size or weight of a package may vary on how to pack a package. |  |  |  |  |

#### **Dimensions**

#### TC-5952C Inner Dimension



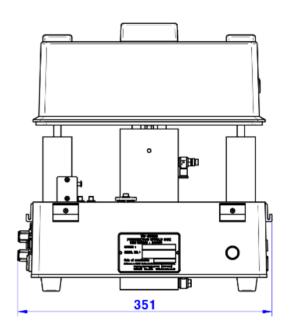


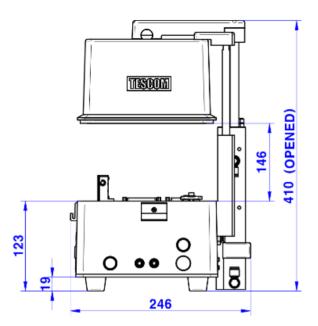
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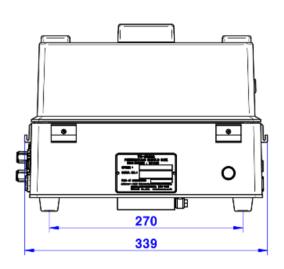


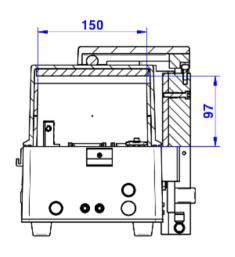
TESCOM (TC-5952C Pneumatic Shield Box Data Sheet)

#### TC-5952C Outer Dimension









### Typical RF Shielding

• The shielding effectiveness below is measured when the blank panel is mounted; other I/O interfac e 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                      |  |  |

## **Ordering Information**

| Order Number | Description   |
|--------------|---|
| TC-5952C     | Pneumatic Shield Box (including accessories bellow) |
|              | Test Report   |
|              | RF Cable, RG-400S, N(m) to N(m) 1 m, 1 pc           |
|              | DATA Cable, DB9(s) to DB9(s) 2 m, 1 pc              |
|              | Power Cable, 220 V, 1 pc                            |
|              | Hand Valve, 1 pc                                    |
|              | Lid Stopper, 1 pc                                   |

#### 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 /<br>Line Voltage         | *Typical Shielding   |
|---|--------------|---|--|
| * ************************************* | 3409-0012-1  | 3 Mbps / 100 VDC,<br>5 Amps max             | >70 dB from 0.5 to 2 GHz<br>>80 dB from 2 to 3 GHz<br>>70 dB from 3 to 6 GHz |
| DB37, 1000pF pi Filter                  |              |   |  |
| DB25, 1000pF pi Filter                  | 3409-0009-1  | 3 Mbps / 100 VDC,<br>5 Amps max             | >70 dB from 0.5 to 2 GHz<br>>80 dB from 2 to 3 GHz<br>>70 dB from 3 to 6 GHz |
| Alcos                                   | 3409-0014-1  | 10 Mbps / 100 VDC,<br>5 Amps max            | >50 dB from 0.5 to 2 GHz<br>>60 dB from 2 to 3 GHz<br>>60 dB from 3 to 6 GHz |
| DB25, 100pF pi Filter                   |              |   | ,  |
|   | 3409-0008-1  | 3 Mbps / 100 VDC,<br>5 Amps max             | >70 dB from 0.5 to 2 GHz<br>>80 dB from 2 to 3 GHz<br>>70 dB from 3 to 6 GHz |
| DB9, 1000pF pi Filter                   |              |   |  |
| DB9, 100pF pi Filter                    | 3409-0010-1  | 10 Mbps / 100 VDC,<br>5 Amps max            | >50 dB from 0.5 to 2 GHz<br>>60 dB from 2 to 3 GHz<br>>60 dB from 3 to 6 GHz |
| USB 2.0 Filter                          | 3409-0018A-3 | 480 Mbps / 5 V, 500 mA /<br>Max Current: 5A | >60 dB from 0.5 to 2 GHz<br>>70 dB from 2 to 3 GHz<br>>70 dB from 3 to 6 GHz |

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TC-5952C Pneumatic Shield Box Data Sheet

| I/O Interface  | Order Number | Typical Data Rate /       | *Typical Shielding       |
|--|--------------|---------------------------|--------------------------|
|  |              | Line Voltage              |                          |
|  | 3409-0042A-1 | 5000 Mbps / 5 V, 900 mA / | >70 dB from 0.5 to 2 GHz |
|  |              | Max Current: 1.5 A        | >70 dB from 2 to 3 GHz   |
|  |              |                           | >55 dB from 3 to 6 GHz   |
| USB 3.0 Filter(Active)   |              |                           |                          |
|  | 3409-0022A   | 1 Gbit/s Copper-Line      | >60 dB from 0.5 to 2 GHz |
| (a) == 0   |              | Ethernet (1000 BASE-T)    | >70 dB from 2 to 3 GHz   |
|  |              |                           | >70 dB from 3 to 6 GHz   |
| RJ-45 Filter   |              |                           |                          |
|  | 3406-0004A   | 50 VDC,                   | >70 dB from 0.5 to 2 GHz |
|  |              | 3 Amps max                | >80 dB from 2 to 3 GHz   |
|  |              |                           | >80 dB from 3 to 6 GHz   |
| DC Power Adaptor,  |              |                           |                          |
|  | 3406-0005A   | 50 VDC,                   | >70 dB from 0.5 to 2 GHz |
|  | 3406-0006A   | 10 Amps max               | >80 dB from 2 to 3 GHz   |
|  |              |                           | >80 dB from 3 to 6 GHz   |
| DC Power Adaptor,  |              |                           |                          |
| Banana Jack Type   |              |                           |                          |
|  | 3103-0009A   | 250 VAC,                  | >70 dB from 0.5 to 2 GHz |
| ( a )  |              | 7 Amps max                | >80 dB from 2 to 3 GHz   |
|  |              |                           | >80 dB from 3 to 6 GHz   |
| AC Power Adaptor   |              |                           |                          |
| - Control of the Cont | 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, N-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   |
|  |              |                           |                          |
| RF, SMA-SMA Connector  |              |                           |                          |

- 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.