

TC-5901C Pneumatic Shield Box



Features

- High RF-shielding
- Pneumatic control of lid operation and optional automatic test fixture motions
- EMI filters on all data ports and power lines
- Remote operation by RS-232C
- Modular I/O design for possible customization of data and RF connection
- Fixture-control air outputs for custom test fixture
- Red and green LED's for pass/fail indication
- Dual pressure control and lid down sensor for safety

Specifications

Mechanical Specifications

| | |
|---------------------------|--|
| Line Voltage | 100 - 240 VAC, 50/60 Hz, 15 watt max. |
| Data Line Capacity | 100 VDC, 3 Amps 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 |
| Dimensions | |
| Inside | 407(W) x 206(D) x 133(H) mm |
| Outside | 459(W) x 300(D) x 300(H) mm, lid closed. 449(H) mm, lid open |
| Weight | Approx. 17 kg |
| *Packing | |
| Size | 620 (W) x 430(D) x 440(H) mm |
| Weight | Approx. 21 kg |

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

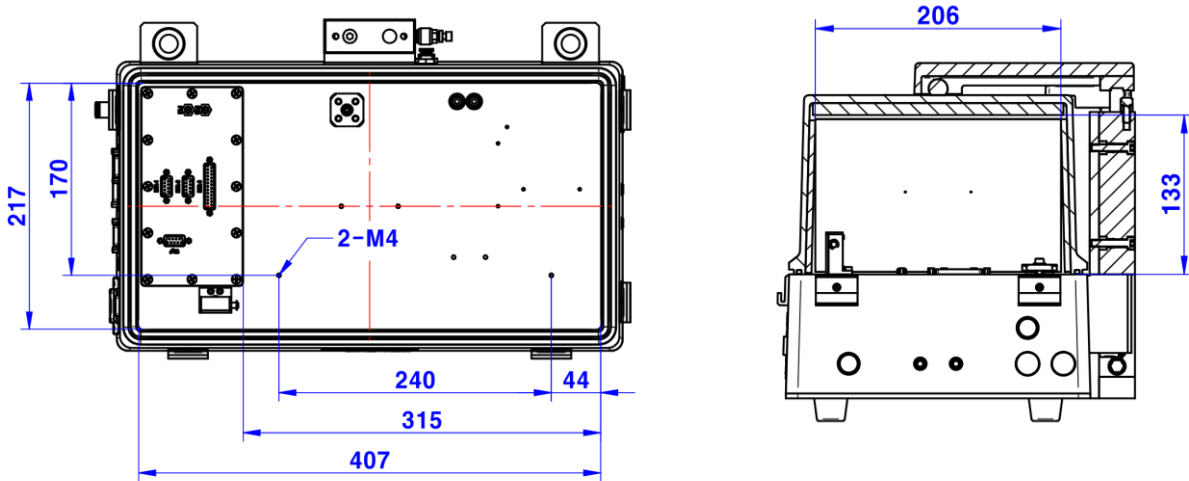
Typical RF Shielding

The shielding effectiveness below is measured with blank panels mounted. Other I/O interface panel may result in different shielding effectiveness.

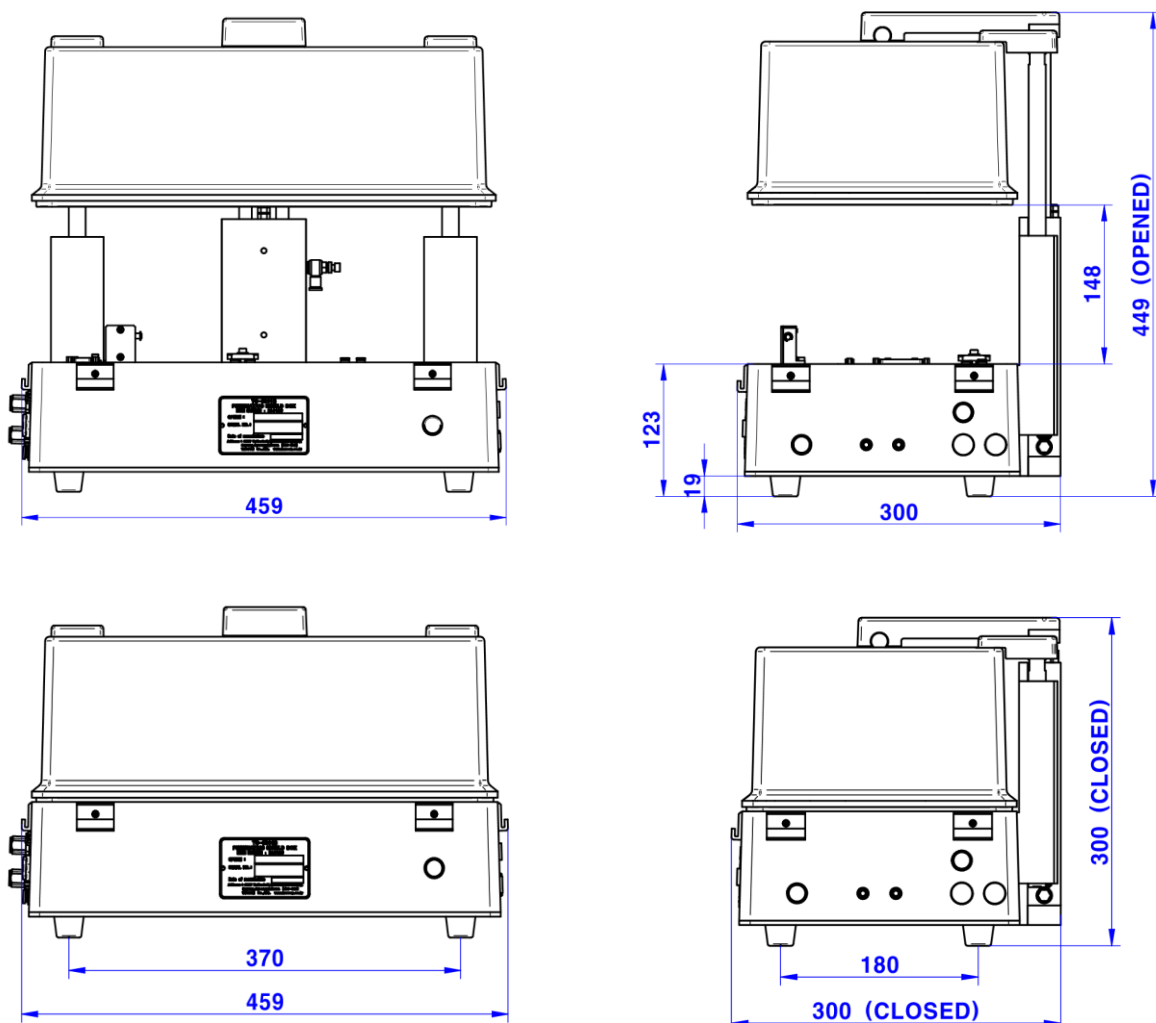
| Frequency | Shielding Effectiveness (dB) |
|------------------|------------------------------|
| 100 to 2000 MHz | > 70 dB |
| 2000 to 3000 MHz | > 60 dB |
| 3000 to 6000 MHz | > 50 dB |

Dimensions

- TC-5901C Inner Dimensions (WxDxH) : 407(W) x 206(D) x 133(H) mm



- TC-5901C Outer Dimensions (WxDxH) : 459(W) x 300(D) x 300(H) mm



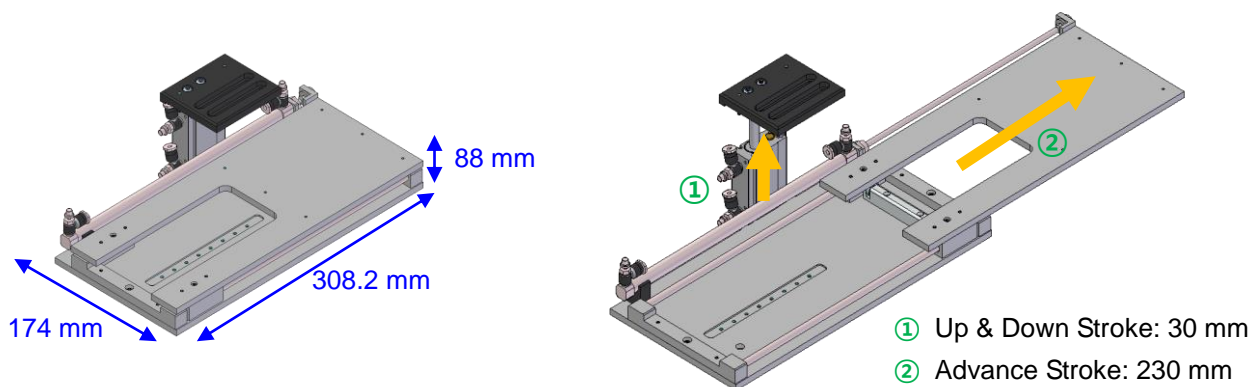
Ordering Information

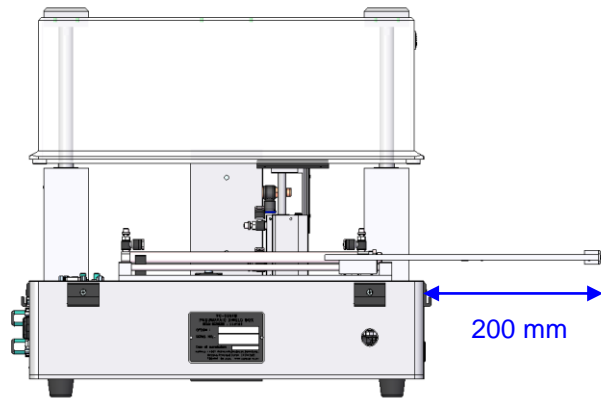
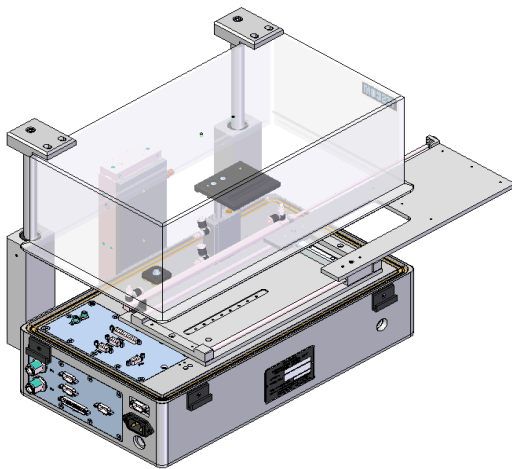
| Order Number | Description |
|--------------|---|
| TC-5901C | Pneumatic Shield Box (including accessories below) |
| | Test Report |
| | RF Cable, SS-402, N(m) to N(m) 1 m, 1 pc |
| | Data Cable, DB9(p) to DB9(s) cable 2 m, 1 pc |
| | Lid Stopper, 1 pc |
| | Hand Valve, 1 pc |
| | Power Cable, 220 V, 1 pc |

Optional Fixture

- TESCOM offers F59014C, an exclusive fixture for TC-5901C, that can suffice various testing conditions depending on the DUT.
- F59014C is mainly composed of in/out handler and up/down probe mounting blocks. In addition, it can be customized to suit customer needs once a sample and the information of DUT is given.








| Fixture | Description |
|----------------|----------------------|
| F59014C | Fixture for TC-5901C |










Custom I/O Interface Panel

- Customized I/O interface panel is available by selecting and arranging I/O interfaces below.
Please contact TESCOM sales team or your local distributor.

| I/O Interface | Description / Order Number | Typical Data Rate / Line Voltage | *Typical Shielding |
|---|---|--|--|
|  | 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: 5 A | >60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz |
|  | USB3.1 Gen 1 Filter (Active)/ 3409-0042A-2 | 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 |
|  | 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 |
|  | 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 |

| I/O Interface | Description / Order Number | Frequency Range / Impedance / V.S.W.R |
|---|--------------------------------------|---------------------------------------|
|  | 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 |

- ***Typical Shielding** is an estimated value with I/O interface applied.
- 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.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE