



Concentric Technology Solutions Inc

Testing Solutions for the Wireless Industry

# TC-5901C 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
- Modular I/O design for possible customization of data and RF connection
- Fixture control air outputs for custom test fixture
- Dual pressure control and Lid Down Sensor for safety
- Red and Green LED's for Pass/Fail indication
- CE compliant : EN 292-1:1991, EN 292-2:1991/A1:1995, EN 983:1996, EN 1050:1996, EN 60204-1:1997

\*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

Concentric Technology Solutions, Inc.

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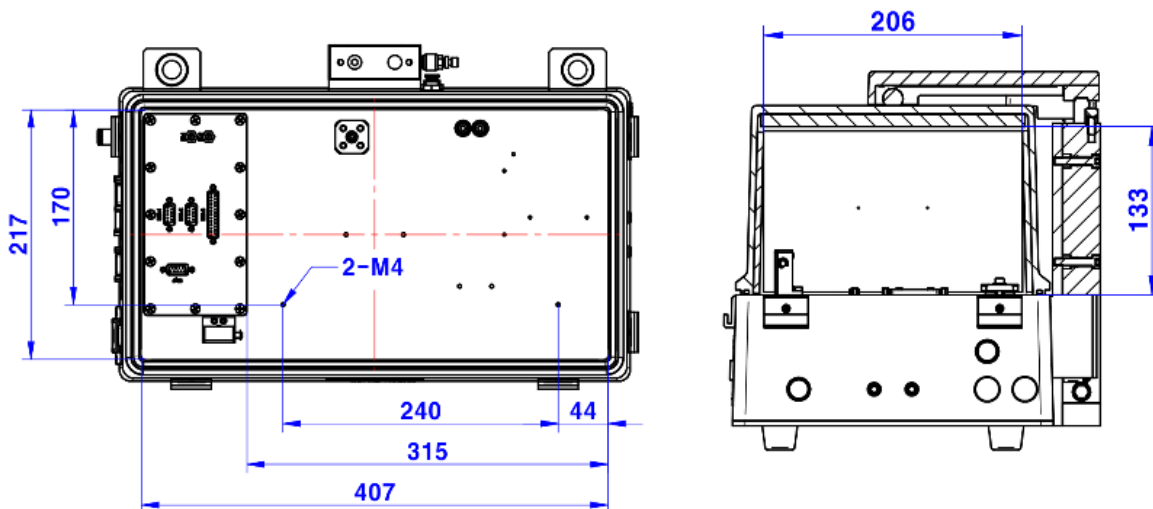
# Specifications

## Mechanical Specifications

<b>Line voltage</b>	
	100 - 240 VAC, 50/60 Hz, 15 watt max.
<b>Data line capacity</b>	
	100 VDC, 5 Amps max
<b>Remote control</b>	
	RS-232C, 3 wire, DB9(p)
<b>Air connection</b>	
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
<b>Dimension</b>	
Inside	407(W) x 217(D) x 133(H) mm
Outside	459(W) x 300(D) x 300(H) mm, lid closed. 449(H) mm, lid open.
Weight	approx. 19 kg
<b>*Packing</b>	
Size	610(W) x 425(D) x 440(H) mm
Weight	approx. 21 kg
*The size or weight of a package may vary on how to pack a package.	

## Dimensions

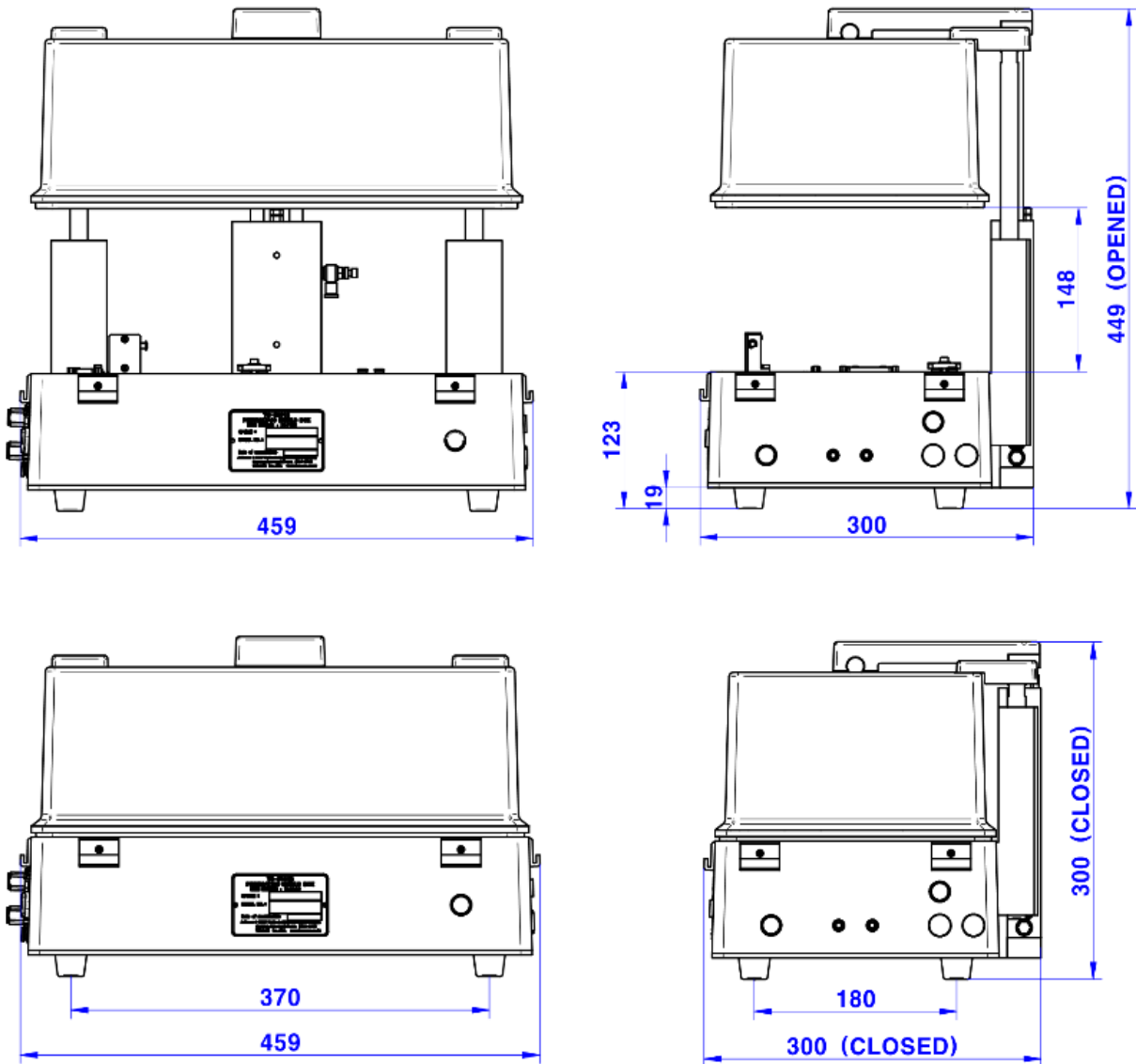
- TC-5901C Inner Dimension



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TC-5901C 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	> 60 dB
3000 to 6000 MHz	> 50 dB

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# Ordering Information

Order Number	Description
TC-5901C	<b>Pneumatic Shield Box (including accessories below)</b> Test Report RF Cable, SS-402, 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 Lid Stopper, 1 pc Hand Valve, 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 / 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

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I/O Interface	Order Number	Typical Data Rate /	*Typical Shielding
 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
 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.

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