

# TC-5910DP 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

## Specifications

### Mechanical Specifications

<b>Line voltage</b>	DC 24 V, Max. 2 A
<b>Remote control</b>	RS-232C, 3 wire, DB9(s)
<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	142(W) x 243(D) x 139(H) mm
Outside	218(W) x 375(D) x 195(H) mm, lid closed. 360(H) mm, lid open.
<b>Weight</b>	approx. 7 kg
<b>*Packing</b>	
Size	370(W) x 460(D) x 280(H) mm
Weight	approx. 8 kg

\* The size or weight of a package may vary on how to pack a package.

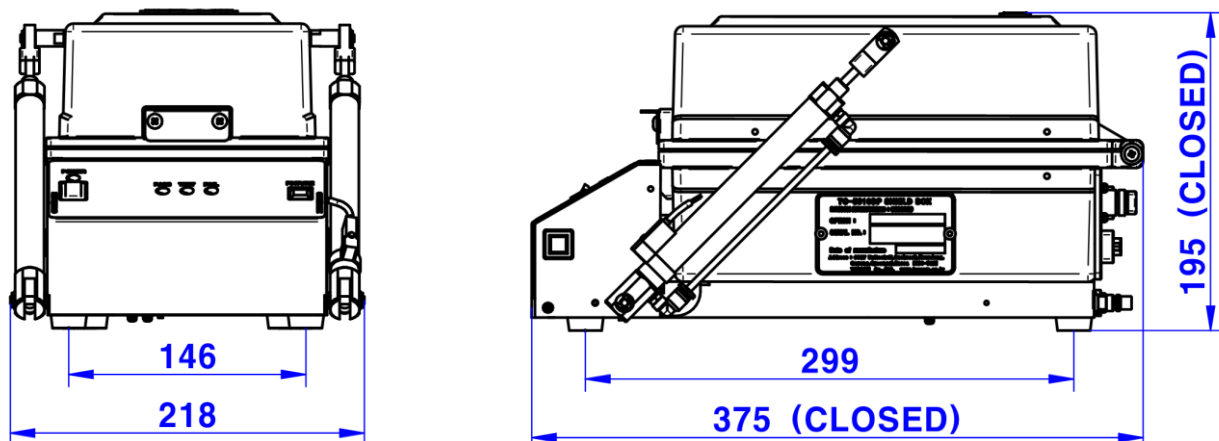
### Typical RF Shielding

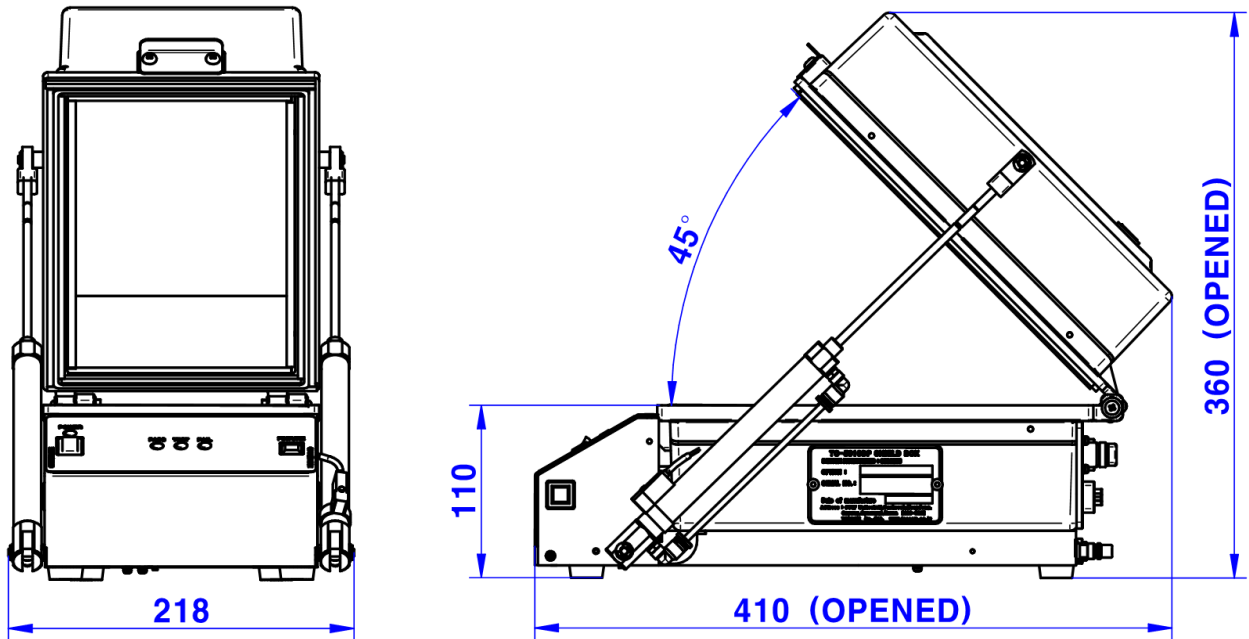
The shielding effectiveness below is measured when the blank panel is mounted; other I/O interface panel results a different shielding effectiveness of the shield box.

Frequency	Shielding effectiveness (dB)
100 to 2000 MHz	> 70 dB
2000 to 3000 MHz	> 70 dB
3000 to 6000 MHz	> 60 dB

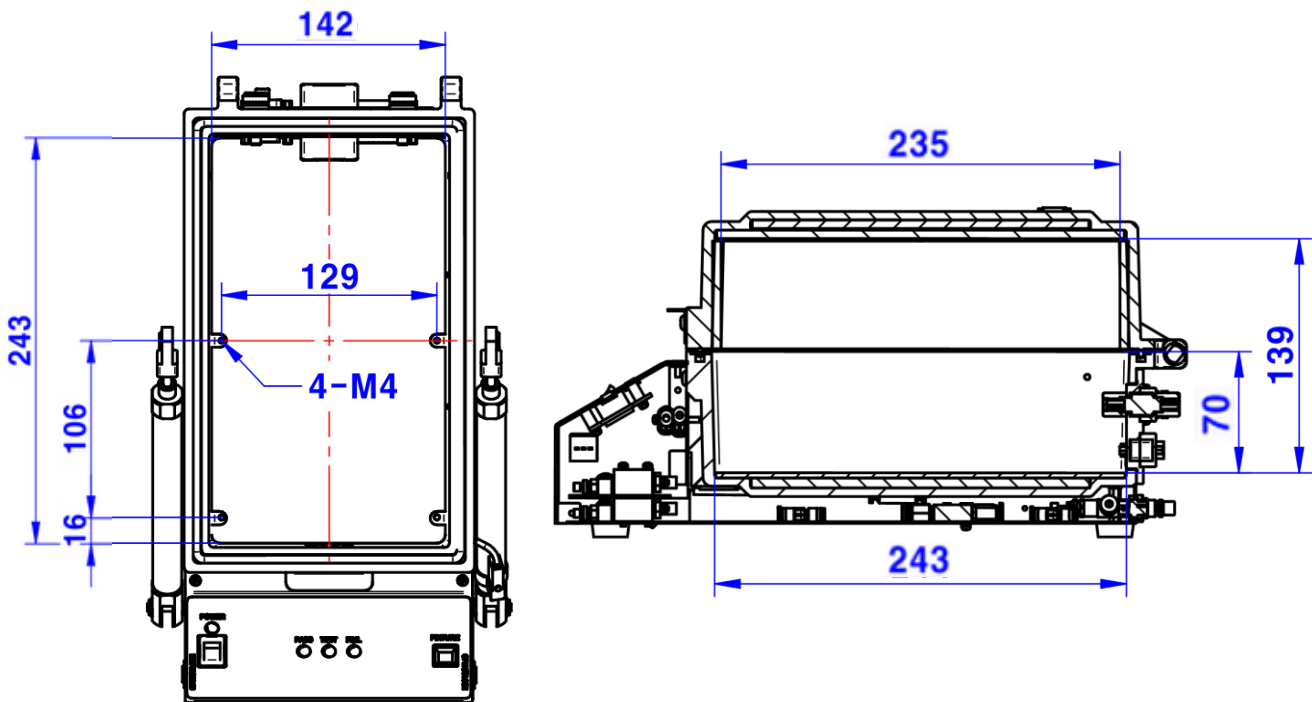
## Dimensions

- TC-5910DP Outer Dimension (WxDxH) : 218(W) x 375(D) x 195(H) mm





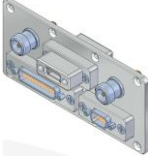
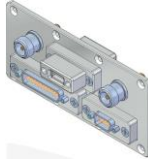
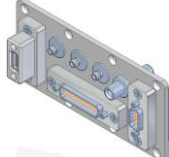
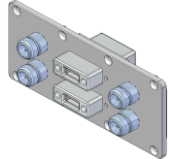
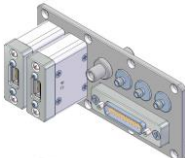
- TC-5910DP Inner Dimension (WxDxH) : 142(W) x 243(D) x 139(H) mm



## Ordering Information

Order Number	Description
TC-5910DP	<b>Pneumatic Shield Box (including accessories below)</b>
	Test Report
	RF Cable, SS-402, N(m) to N(m) 1 m, 1 pc
	RS-232C Cable, DB9(p) to DB9(s) cable 2 m, 1 pc
	Air Coupler, 1 pc
	Switching Power Supply, 1 pc

## Pre-Configured I/O Interface Panel

I/O Interface Panel	Order Number	Configuration
	M591012B	<ul style="list-style-type: none"> <li>Two(2) N(f) outside and SMA(f) inside</li> </ul>
	M591012A*	<ul style="list-style-type: none"> <li>one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter</li> <li>one(1) USB2.0 outside and inside</li> </ul>
<b>Data Interface Panel</b>		
	M591016B	<ul style="list-style-type: none"> <li>two(2) N (f) ouside and SMA (f) inside</li> </ul>
	M591016E*	<ul style="list-style-type: none"> <li>one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter</li> <li>one(1) DB9(p) outside and DB9(s) inside, 100 pF Pi filter</li> <li>one(1) USB2.0 outside and inside</li> </ul>
<b>Data Interface Panel</b>		
	M591017B	<ul style="list-style-type: none"> <li>three(3) SMA (f) ouside and SMA (f) inside</li> <li>one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter</li> <li>one(1) DB9(p) outside and DB9(s) inside, 100 pF Pi filter</li> <li>one(1) USB 2.0 outside and inside</li> <li>one(1) DC Power Jack Adaptor</li> </ul>
<b>Data Interface Panel</b>		
	M591023A	<ul style="list-style-type: none"> <li>four(4) N (f) ouside and SMA (f) inside</li> <li>two(2) USB2.0 outside and inside</li> </ul>
<b>Data Interface Panel</b>		
	M591047A	<ul style="list-style-type: none"> <li>three(3) SMA (f) ouside and SMA (f) inside</li> <li>one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter</li> <li>two(2) USB 3.0 outside and inside</li> <li>one(1) DC Power Jack Adaptor</li> </ul>
<b>Data Interface Panel</b>		



In this (\*) case, DB25 100 pF filter is fitted instead of 1000 pF

## Custom I/O Interface Panel

- Customized I/O Interface Panel is available by selecting below I/O interfaces and combine.

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
	USB 3.0 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

- 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.

## Fixture

- Tescom offers flexible fixtures that can change the location of the DUT fixture block. Depending on the shape of DUT, users can create its own fixture using fixture blocks within seconds. Moreover, customized fixtures that meet the demands of customers can be manufactured and supplied if necessary.
- The various types of antenna coupler options with fixtures allow optimal measurement environment configuration that fits the characteristics of each DUT.

Fixture	Order Number	Description
	F59106A	<ul style="list-style-type: none"> <li>• Antenna Coupler fixed type fixture</li> <li>• Antenna Coupler(Optional) : TC-93026A</li> <li>• 140(W) x 210(D) x 23.5(H) mm</li> </ul>

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE