

**Concentric Technology Solutions Inc** 

Testing Solutions for the Wireless Industry

# TC-5915AP 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
- Red and Green LED's for Pass/Fail indication
- RS-232C Remote Control



TESCOM

### Specifications

#### **Mechanical Specifications**

Line voltage	
	DC 24 V, Max. 2 A
Remote control	
	RS-232C, 3 wire, DB9(s)
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	220(W) x 280(D) x 170(H) mm
Outside	324(W) x 432(D) x 252(H) mm, lid closed. 373(H) mm, lid open.
Weight	
	approx. 9 kg
*Packing	
Size	460(W) x 528(D) x 335(H) mm
Weight	approx. 10 kg
*The size or weight of a pa	ickage may vary on how to pack a package.

#### **Typical RF Shielding**

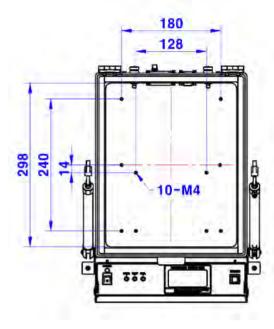
• The shielding effectiveness below is measured when the blank panel is mounted; other I/O interfac e panel results a different shielding effectiveness of the shield box.

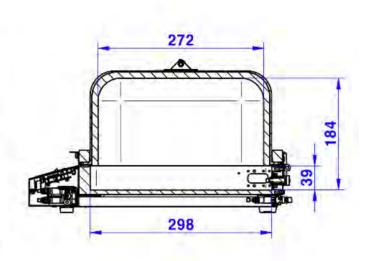
Frequency	Shielding effectiveness (dB)	
100 to 2000 MHz	> 70 dB	
2000 to 3000 MHz	> 70 dB	
3000 to 6000 MHz	> 60 dB	



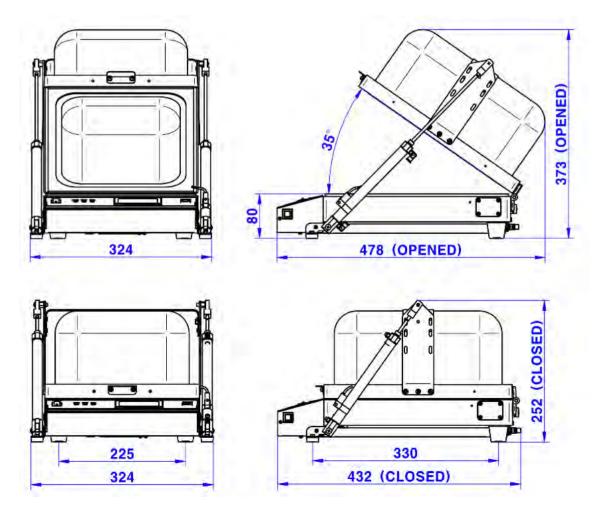
#### Dimensions

TC-5915AP Inner Dimension





TC-5915AP Outer Dimension



\*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

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## Ordering Information

Order Number	Description
TC-5915AP	Pneumatic Shield Box (including accessories bellow)
	Test Report
	RF Cable, RG-400S, N(m) to N(m) 1 m, 1 pc
	DATA Cable, DB9(p) to DB9(s) 2 m, 1 pc
	Air Coupler, 1pc
	Switching Power Supply, 1 pc

#### Pre-Configured I/O Interface Panel

I/O Interface Panel	Order Number	Configuration
Data Interface Panel	M591542B	<ul> <li>one(1) DB9(p) outside and DB9(s) inside, 1000 pF Pi filter</li> <li>two(2) N(f) outside and SMA(f) inside</li> <li>one(1) USB 2.0 outside and inside</li> </ul>
Data Interface Panel	M591542D	<ul> <li>two(2) N(f) outside and SMA(f) inside</li> <li>one(1) USB 2.0 outside and inside</li> <li>one(1) RJ-45 outside and inside</li> </ul>
Data Interface Panel	M591546A	<ul> <li>two(2) SMA(f) outside and SMA(f) inside</li> <li>two(2) USB 2.0 outside and inside</li> <li>one(1) DC power Adapter</li> </ul>
Data Interface Panel		



#### Pre-Configured Side I/O Interface Panel

Side I/O Interface Panel	Order Number	Configuration	
RJ-45 Side Interface Panel	M591531A	<ul> <li>one(1) RJ-45 outside and inside</li> </ul>	
DC Power Side Interface Panel	M591532A	one(1) DC Power Adaptor	
DB9 Side Interface Panel	M591533A	<ul> <li>one(1) DB9(p) outside and DB9(s) inside,</li> </ul>	
		1000 pF Pi filter	
USB 2.0 Side Interface Panel	M591534B	• 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
DB37, 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
	3408-0039		<ul><li>&gt;60 dB from 0.5 to 2 GHz</li><li>&gt;70 dB from 2 to 3 GHz</li><li>&gt;70 dB from 3 to 6 GHz</li></ul>
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.