

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

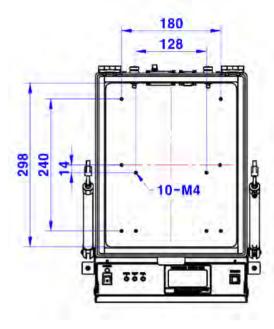
• The shielding effectiveness below is measured when the blank panel is mounted; other I/O interfac e panel results a different shielding effectiveness of the shield box.

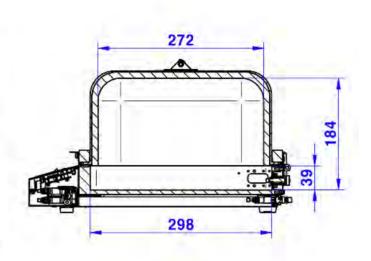
Frequency	Shielding effectiveness (dB)	
100 to 2000 MHz	> 70 dB	
2000 to 3000 MHz	> 70 dB	
3000 to 6000 MHz	> 60 dB	



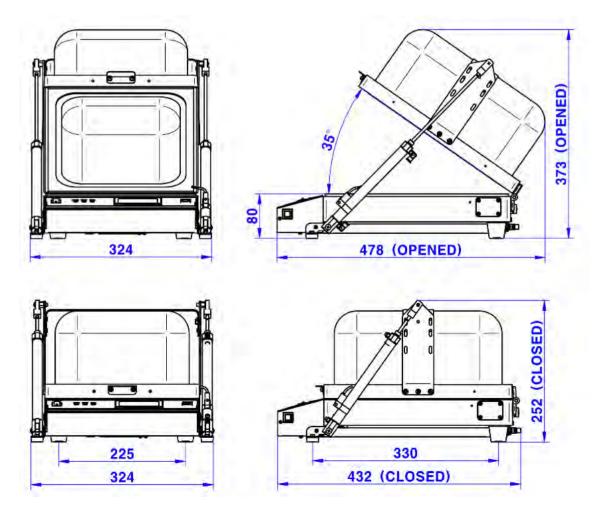
Dimensions

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	 one(1) DB9(p) outside and DB9(s) inside, 1000 pF Pi filter two(2) N(f) outside and SMA(f) inside one(1) USB 2.0 outside and inside
Data Interface Panel	M591542D	 two(2) N(f) outside and SMA(f) inside one(1) USB 2.0 outside and inside one(1) RJ-45 outside and inside
Data Interface Panel	M591546A	 two(2) SMA(f) outside and SMA(f) inside two(2) USB 2.0 outside and inside one(1) DC power Adapter
Data Interface Panel		



Pre-Configured Side I/O Interface Panel

Side I/O Interface Panel	Order Number	Configuration	
RJ-45 Side Interface Panel	M591531A	 one(1) RJ-45 outside and inside 	
DC Power Side Interface Panel	M591532A	one(1) DC Power Adaptor	
DB9 Side Interface Panel	M591533A	 one(1) DB9(p) outside and DB9(s) inside, 	
		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



TESCOM TC-5915AP Pneumatic Shield Box Data Sheet

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		>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.