



Concentric Technology Solutions Inc

Testing Solutions for the Wireless Industry

TC-5972DP Pneumatic Shield Box



Features

- Reliable High RF Shielding
- Pneumatic control of lid open-close and optional test fixture motions
- Easily customizable to meet various test needs
- Shock Absorbers on lid
- Red and Green LED's for Pass/Fail indication
- EMI filters on all data ports and power line
- Remote operation by RS-232C
- Multilayer absorber for radiation testing

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE

Concentric Technology Solutions, Inc.

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Specifications

Mechanical Specification

RF Connectors without module	4 N (f) outside and SMA (f) inside
Line voltage	DC 24V, Max. 2A.
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	445(W) x 445(D) x 360(H) mm, 230(D)mm top side
Outside	580(W) x 661(D) x 452(H) mm, door closed. 657(H) mm, door open
Door	420(W) x 358(D)
Weight	approx. 40 kg
*Packing	
Size	630(W) x 810(D) x 575(H) mm
Weight	approx. 43 kg

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

Typical RF Shielding

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

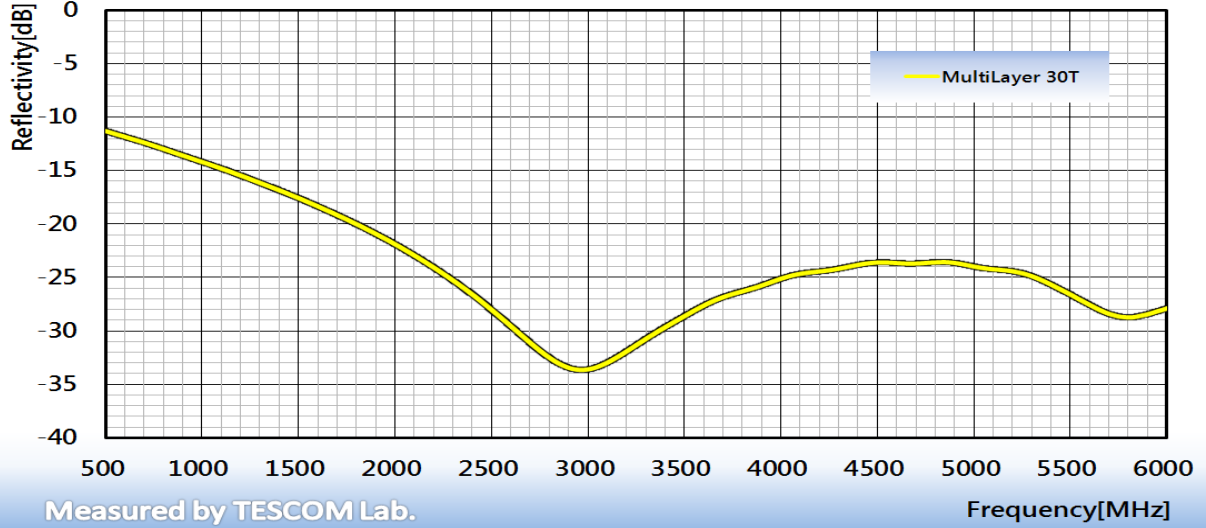
100 to 2000 MHz	> 70 dB
2000 to 3000 MHz	> 70 dB
3000 to 6000 MHz	> 60 dB

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Absorber Reflectivity

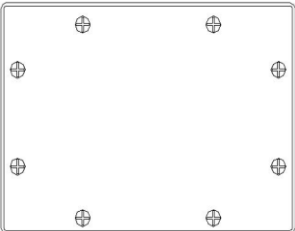

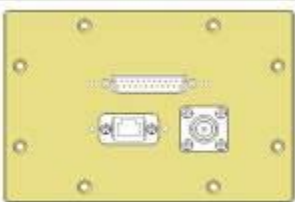

Measured using the VNA signal that is reflected by Absorber.



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Ordering Information

Order Number	Description
TC-5972DP	Pneumatic Shield Box (including accessories below)
	Operating Manual Test Report RG400S, N(m) to N(m) cable, 1 m, 1 pc DB9(p) to DB9(s) cable, 2 m, 1 pc. Air Coupler Switching Power Supply
 <p data-bbox="300 954 435 981">Blank Panel</p>	M5970C01A <ul data-bbox="794 696 1409 763" style="list-style-type: none"> *Shielding Effectiveness: >70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz, >55 dB from 3 to 6 GHz
 <p data-bbox="236 1249 515 1276">RF and AC Power Panel</p>	M5970C02A <ul data-bbox="794 999 1409 1144" style="list-style-type: none"> *Shielding Effectiveness: >70 dB from 0.5 to 3 GHz >60 dB from 3 to 6 GHz 1 N (f) outside and SMA (f) inside AC Inlet, 100 VAC~300 VAC, 10 A
 <p data-bbox="252 1512 483 1579">RF and RJ45, DB25 Data Interface Panel</p>	M5970C03A <ul data-bbox="794 1283 1409 1462" style="list-style-type: none"> *Shielding Effectiveness: >60 dB from 0.5 to 3GHz, >55 dB from 3 to 6 GHz 1 N (f) outside and SMA (f) inside RJ-45 outside and inside, 10 pF Pi filter One DB25(p) outside, DB25(s) inside, 1000 pF Pi filter
 <p data-bbox="252 1814 483 1881">RF and USB, DB25 Data Interface Panel</p>	M5970C04A <ul data-bbox="794 1597 1409 1776" style="list-style-type: none"> *Shielding Effectiveness: >60 dB from 0.5 to 3 GHz, >55 dB from 3 to 6 GHz 1 N (f) outside and SMA (f) inside USB outside and inside One DB25(p) outside, DB25(s) inside, 1000 pF Pi filter

*Each shielding effectiveness is measured when each I/O interface panel, which is shown above, is mounted.

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I/O Interface

Customized I/O Interface panels are available. Please contact us.

I/O Interface	Order Number	Typical Data Rate / Line Voltage	*Typical Shielding
 DB25, 1000 pF Pi Filter	3409-0009-1	3 Mbps	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 DB25, 100 pF Pi Filter	3409-0014-1	10 Mbps	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 DB9, 1000 pF Pi Filter	3409-0008-1	3 Mbps	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 DB9, 100 pF Pi Filter	3409-0010-1	10 Mbps	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 USB A(p) 2.0, Pi Filter	3409-0018A-3	480 Mbps	>60 dB from 0.5 to 6 GHz
 RJ-45, Pi Filter	3409-0022A	250 Mbps	>60 dB from 0.5 to 3 GHz
 DC Power Adaptor, Jack Type	3409-0004A	50 VDC, 3 Amps max	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 DC Power Adaptor, Banana Jack Type	3409-0005A	50 VDC, 50 VDC, 10 Amps max	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
 AC Power Adaptor		250 VAC, 7 Amps max	>70 dB from 0.5 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz

*Each shielding effectiveness is measured when each I/O interface panel, which is shown above, is mounted.

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