



Concentric Technology Solutions Inc

Testing Solutions for the Wireless Industry

TC-5972AP/CP 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
- Ferrite observer for radiation testing (TC-5972CP)



Specifications

Mechanical Specification

RF Connectors without module	4 N (f) outside and SMA (f) inside
Line voltage	DC 24 V, 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	470(W) x 470(D) x 360(H) mm, 230(D)mm top side
Outside	546(W) x 620(D) x 444(H) mm, door closed. 687(H) mm, door open
Door	420(W) x 358(H)
Weight	approx. 48 kg
*Packing	
Size	810 (W) x 630(D) x 575(H) mm
Weight	approx. 51 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	> 50 dB

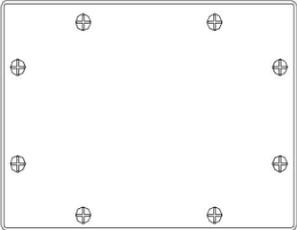
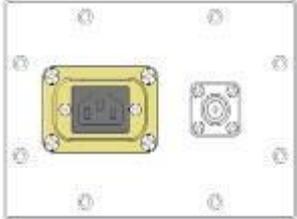
SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE



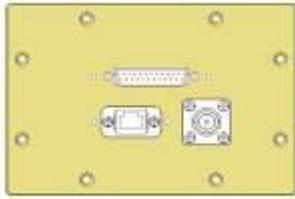
Ordering Information

Order Number	Description
	Pneumatic Shield Box (including accessories below)
	Operating Manual
	Test Report
TC-5972AP	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
	Pneumatic Shield Box (including accessories below)
	Operating Manual
	Test Report
TC-5972CP	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

I/O Interface Panel

	Order Number	Configuration
	M5970C01A	<ul style="list-style-type: none"> *Shielding Effectiveness: >70 dB from 0.1 to 2 GHz >60 dB from 2 to 3 GHz, >55 dB from 3 to 6 GHz
Blank Panel		
	M5970C02A	<ul style="list-style-type: none"> *Shielding Effectiveness: >70 dB from 0.1 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
RF and AC Power Panel		

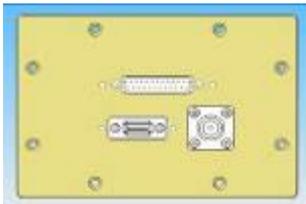
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M5970C03A

- *Shielding Effectiveness: >60 dB from 0.1 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

**RF and RJ45, DB25
Data Interface Panel**



M5970C04A

- *Shielding Effectiveness: >60 dB from 0.1 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

**RF and USB, DB25
Data Interface Panel**

* Shielding effectiveness indicated above is the measured value obtained with the respective connectors installed.

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 0.1 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 0.1 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 0.1 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 0.1 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz

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	3409-0018A-3	480 Mbps	>60 dB from 0.1 to 6 GHz
USB A(p) 2.0, 10 pF Pi Filter			
	3409-0022A	250 Mbps	>60 dB from 0.1 to 3 GHz
RJ-45, 10 pF Pi Filter			
	3409-0004A	50 VDC, 3 Amps max	>70 dB from 0.1 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
DC Power Adaptor, Jack Type			
	3409-0005A	50 VDC, 50 VDC, 10 Amps max	>70 dB from 0.1 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
DC Power Adaptor, Banana Jack Type			
		250 VAC, 7 Amps max	>70 dB from 0.1 to 2 GHz >60 dB from 2 to 3 GHz >55 dB from 3 to 6 GHz
AC Power Adaptor			

*Shielding effectiveness indicated is with specific connector installed on I/O interface panel.

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