

TC-5955AP Pneumatic Shield Box





Features

- Reliable High RF Shielding up to 6 GHz
- Designed for long life
- Specifically designed for various types of mobile phones
- Pneumatic control of lid open-close
- Absorbing materials for stable measurement results
- EMI filters on all data ports and power line
- Remote operation by RS-232C

TESCOM

TC-5955AP Pneumatic Shield Box Data Sheet

Introduction

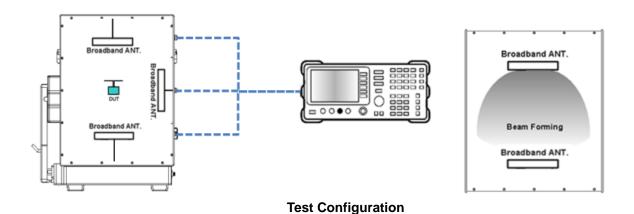
TC-5955AP, Pneumatic Shield box generates the Electro-Magnetic field for testing small RF devices such as Mobile Phones, Bluetooth, WLAN, Zigbee, etc. An external test signal applies through the input port of TC-5955AP generates a consistent and predictable test field inside.

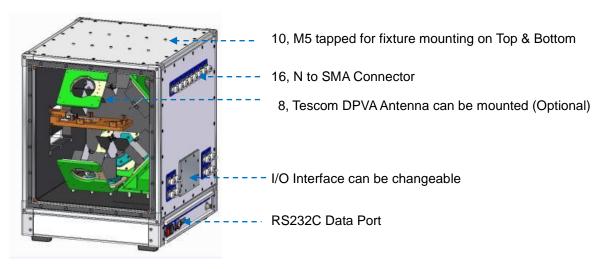
The unique compact and economical design is optimized for medium accuracy measurements

Applications

TEL: 817-503-8862 FAX: 817-503-8866

- Receiver sensitivity testing, Transmitter radiated power testing.
- Mobile Phones, WLAN, PDA, Bluetooth, DAB/DMB, LTE, GNSS.





Basic Features (Cross-Section)

Specifications

Mechanical Specification		
Basic RF connector	16, N(f) outside to SMA(f) inside	
Basic Data connector	None	
Remote control	RS-232C, Dual Remote Switch	
Air connection		
Main connection	6 mm OD hose, one-touch fitting	
Input air pressure	5 to 10 bar	
Dimension		
Outside	534(W) x 526(D) x 583(H) mm Door Closed, 786(D) mm Door Open	
Door Size	176(W) x 130(H) mm	
Door Stroke (Open/Close)	260 mm	
Weight	approx. 39 kg	
*Packing		
Size	676 (W) x 636(D) x 699(H) mm	
Weight	approx. 46 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.

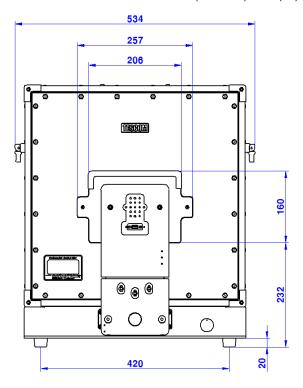
100 to 2000 MHz	> 60 dB	
2000 to 3000 MHz	> 60 dB	
3000 to 6000 MHz	> 60 dB	

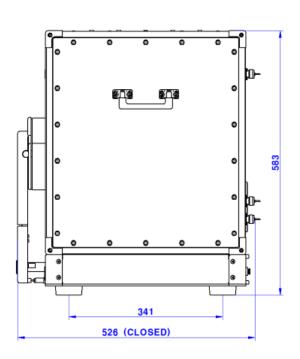
TESCOM

TC-5955AP Pneumatic Shield Box Data Sheet

Dimensions

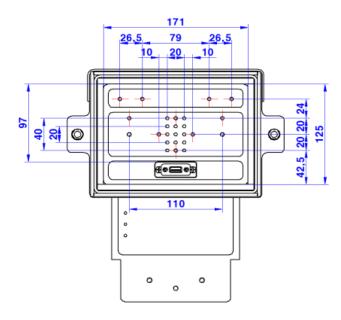
• TC-5955AP Outer Dimension (WxDxH): 534(W) x 526(D) x 583(H) mm

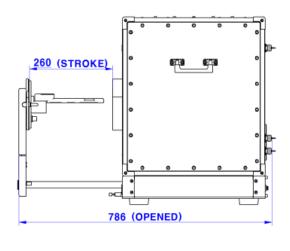




Front View

Side View(closed)





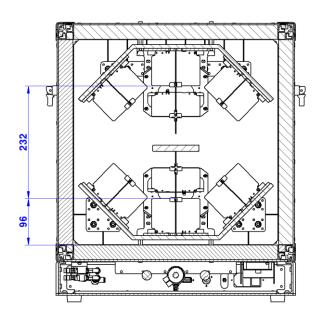
Door View

Side View(opened)

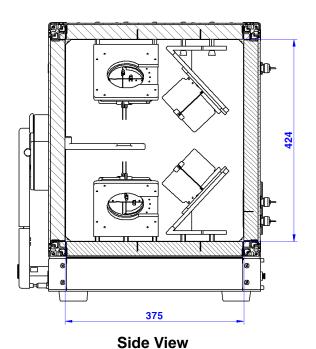
TC-5955AP Pneumatic Shield Box Data Sheet

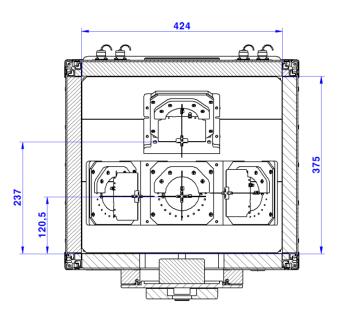
• TC-5955AP Inner Dimension (WxDxH): 424(W) x 375(D) x 424(H)

TESCOM

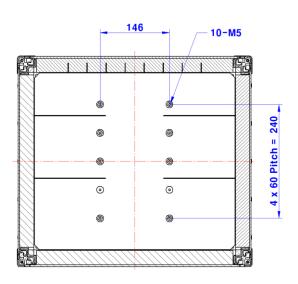


Front View





Bottom View (Ant. Mounted)



Top View (Ant. Removed)

◯ TESCOM

TC-5955AP Pneumatic Shield Box Data Sheet

Ordering Information

Order Number	Description	
TC-5955AP	Pneumatic Shield Box (including accessories below)	
	Test Report	
	SS402, N(m) to N(m) cable, 2 m, 1 pcs	
	Power Cable, 110 V, 1 pc	
	Remote Switch, 2 m, 1 pc	

Pre-Configured I/O Interface Panel

I/O Interface Panel	Order Number	Configuration
Data Interface Panel	M5970D01A	Blank module (Absorber)

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 /	3 Mbps / 100 VDC,	>70 dB from 0.5 to 2 GHz
	3409-0009-1	5 Amps max	>80 dB from 2 to 3 GHz
			>70 dB from 3 to 6 GHz
	DB25, 100pF pi Filter /	10 Mbps / 100 VDC,	>50 dB from 0.5 to 2 GHz
	3409-0014-1	5 Amps max	>60 dB from 2 to 3 GHz
			>60 dB from 3 to 6 GHz
	DB9, 1000pF pi Filter /	3 Mbps / 100 VDC,	>70 dB from 0.5 to 2 GHz
	3409-0008-1	5 Amps max	>80 dB from 2 to 3 GHz
			>70 dB from 3 to 6 GHz
	DB9, 100pF pi Filter /	10 Mbps / 100 VDC,	>50 dB from 0.5 to 2 GHz
8	3409-0010-1	5 Amps max	>60 dB from 2 to 3 GHz
			>60 dB from 3 to 6 GHz
	USB 2.0 Filter /	480 Mbps / 5 V, 500 mA /	>60 dB from 0.5 to 2 GHz
	3409-0018A-3	Max Current: 5 A	>70 dB from 2 to 3 GHz
			>70 dB from 3 to 6 GHz

TESCOM TC-5955AP Pneumatic Shield Box Data Sheet

	USB 3.0 Filter(Active) /	5000 Mbps/ 5 V, 900 mA /	>70 dB from 0.5 to 2 GHz
	3409-0042A-1	Max Current: 1.5 A	>70 dB from 2 to 3 GHz
			>55 dB from 3 to 6 GHz
	RJ-45 Filter /	1 Gbit/s Copper-Line	>60 dB from 0.5 to 2 GHz
	3409-0022A	Ethernet (1000 BASE-T)	>70 dB from 2 to 3 GHz
			>70 dB from 3 to 6 GHz
	DC Power Adaptor /	50 VDC,	>70 dB from 0.5 to 2 GHz
	3406-0004A	3 Amps max	>80 dB from 2 to 3 GHz
			>80 dB from 3 to 6 GHz
	DC Power Adaptor	50 VDC,	>70 dB from 0.5 to 2 GHz
	(Banana Jack Type) /	10 Amps max	>80 dB from 2 to 3 GHz
	3406-0005A, 3406-0006A		>80 dB from 3 to 6 GHz
	AC Power Adaptor /	250 VAC,	>70 dB from 0.5 to 2 GHz
12	3103-0009A	7 Amps max	>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 11 GHz / 50 Ω / 1.15 max
	RF, SMA-SMA Connector / 3408-0039	From DC to 18 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.