

# TC-5901B Pneumatic Shield Box

## Application

TC-5901B Pneumatic Shield Box is about 50% larger in test area and height than our popular TC-595X series shield boxes providing more flexibility in handling larger devices and test fixtures. This product provides an efficient RF-isolated test environment for manufacturing mobile phones and wireless PDA's.



## Key Features

- Reliable High RF shielding up to 5GHz owing to simple up-down lid motion
- Pneumatic control of lid open-close and optional automatic test fixture motions
- EMI filters on all data ports and power line
- Manual or remote operation(RS-232C)
- Modular I/O design for possible customization of data and RF connection
- Fixture control air outputs for custom test fixture
- Red and Green LED 's for Pass/Fail indication
- Dual pressure control and Lid Down Sensor for safety
- CE compliant : EN 292-1:1991, EN 292-2:1991/A1:1995, EN 983:1996, EN 1050:1996, EN 60204-1:1997

## Specification

- **Shielding Effectiveness** : >70 dB, from DC to 2.5 GHz,including connectors
- **Remote control** : RS-232C, 3 wire, DB-9 M
- **Input air pressure** : 5 bar to 10 bar
- **Main air connector** : 6mm OD hose, one-touch push-on fitting
- **Fixture control air connectors** : 4mm OD, one-touch push-on fitting
- **Line voltage** : 100 to 240 VAC, 50/60 Hz, 15 watt max
- **Working space** : 408(W) x 218(D) x 135(H) mm
- **Dimension** : 459(W) x 300(D) x 302(H) mm, lid closed. 449(H) mm, lid open
- **Weight without optional test fixture** : 20 kg

## Lid Characteristics

- **Long Life Up-Down design**
- **Lid Speed Control Valve**
- **Dual Pressure** : Lid closes without air pressure
- **Lid Down Sensor** : Lid opens if the lid doesn't close fully within 2 sec.
- **Initial Lid Position** : Lid opens when the air is connected regardless of AC power
- **Internal Electronic Cycle Counter** (downloadable to PC thru RS-232C)

## Electrical I/O

### User Data I/O Connectors

- DATA #1, #2 : DB9-P outside, DB9-S inside, 1000pF Pi filter
- DATA #3 : DB25-P outside, DB25-S inside, 1000pF Pi filter
- DATA #4 : DB9-P outside, DB9-S inside, for USB 2.0 or 100MBps LAN, 100pF Pi filter

### RF Connectors

- RF #1,#2 : N-type outside, SMA inside

### Remote Control Connector

- RS-232C : DB9-P

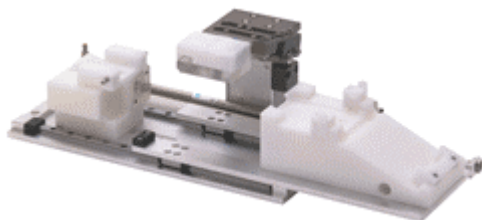
### AC Line Input

- IEC Type, Detachable

## Fixture Customization

TC-5901B system with a custom fixture TC-59014A allows automation of most of the test processes. The fixture holds the device, brings it inside the shield box, makes test signal connections and returns the device to the starting position when the test is completed. Once the device is manually loaded on the DUT cradle and the serial number scanned, the rest of the test procedures can be automated. The custom fixture option, TC-59014A may be ordered through Tescom by supplying the necessary device information and samples to help design and verification. Typically, every device has unique shape and electrical connections requiring mechanical and electrical customizations from its basic platform design.

**A sample design is shown below.**



**TC-59014A Typical Fixture**



**Fixtures fitted**

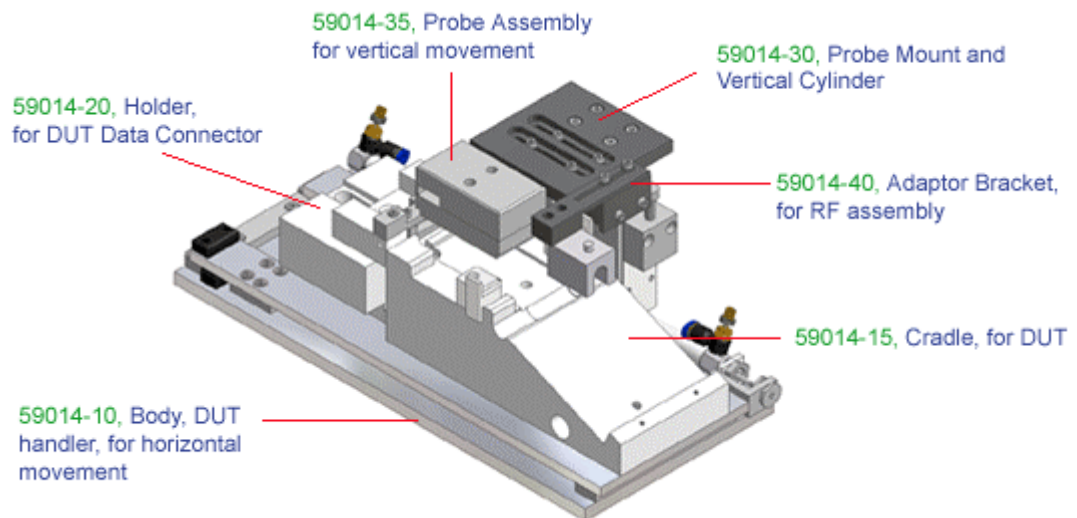
**Ordering Information**

TC-5901B, Pneumatic Shield Box

TC-59014A, Custom Fixture for 5901B

5901-71, Dual open/close switch

5901-80, Spare gasket Assy, set of 2 pcs



**View of TC-59014A fixture**

Design Patent 240189

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE