

TC-5970DU Shield Box



Features

- Reliable RF shielding from 0.1 GHz to 12 GHz
- Specifically designed for laptop size devices
- Easy open/close
- EMI filters on all data ports and power lines
- Customizable I/O interface panels
- Side cooling fans (optional)

Specifications

RF Specifications

Frequency Range 0.1 GHz to 12 GHz

***Shielding Effectiveness**

0.5 GHz to 3 GHz	> 70 dB (meas.)
3 GHz to 6 GHz	> 60 dB (meas.)
6 GHz to 12 GHz	> 60 dB (meas.)

* The shielding effectiveness is measured with blank panels mounted; other I/O interface panel may result in different shielding effectiveness.

Mechanical Specifications

Basic RF Connector Six(6) N(f) outside and SMA(f) inside

Dimensions

Inside	544(W) x 546(D) x 425(H) mm, 201(D) mm Top side
Outside	662(W) x 703(D) x 537(H) mm, lid closed, 810(H) mm, lid open

Weight Approx. 38 kg

***Packing**

Size	870(W) x 850(D) x 720(H) mm
Weight	Approx. 54 kg

* The size or weight of a package may vary depending on how the product is packed.

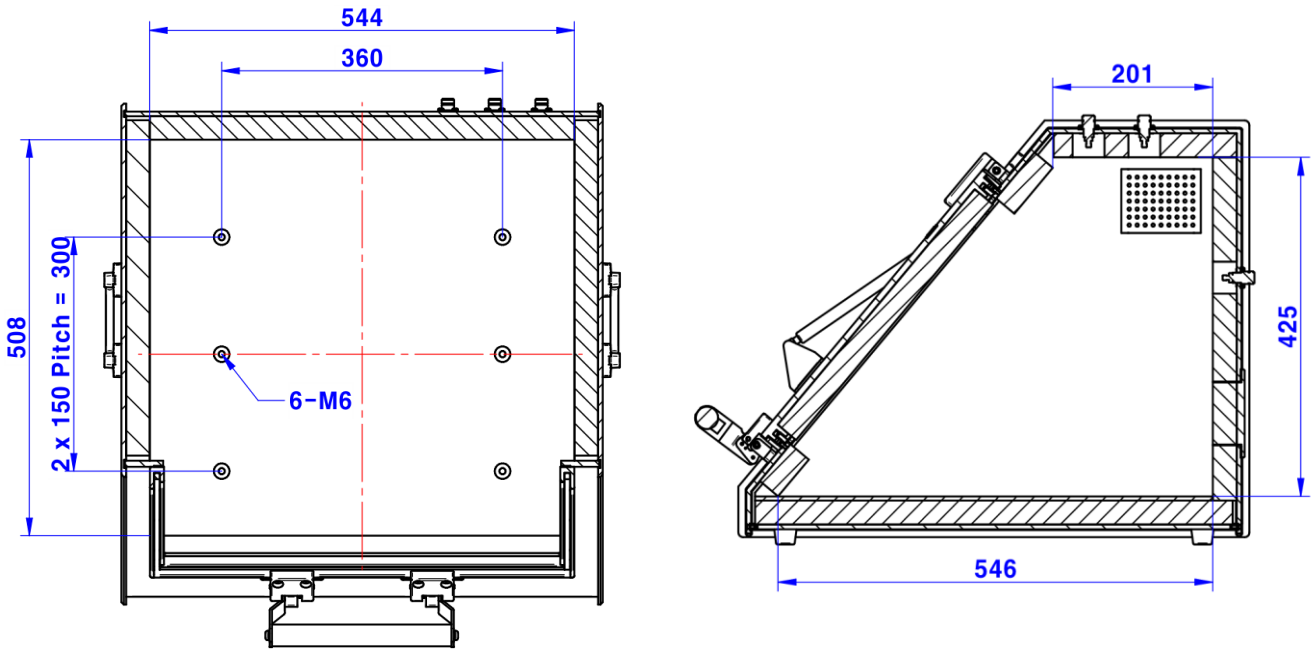
Absorber Reflectivity

Referring to a metal plate (0 dB @ 0.5 GHz to 12 GHz), signal reduction is measured with the RF absorber is inserted.

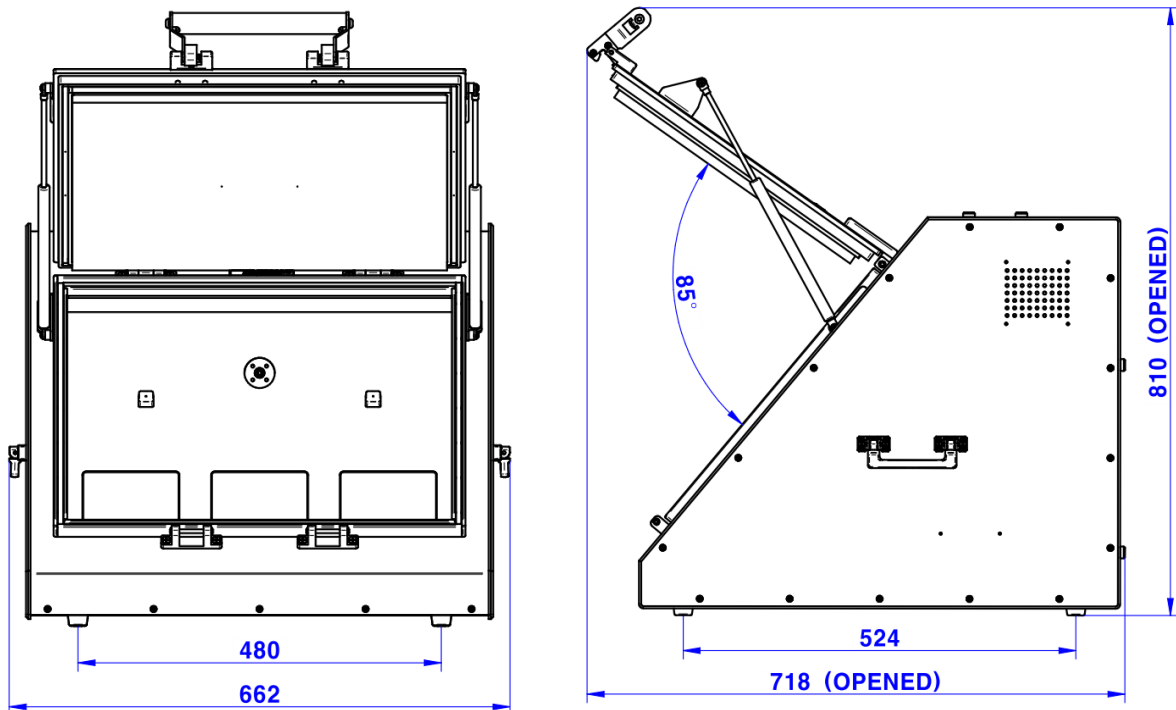
Frequency	Reflectivity [dB]
0.5 GHz to 2 GHz	10 dB (Typ.)
2 GHz to 12 GHz	20 dB (Typ.)

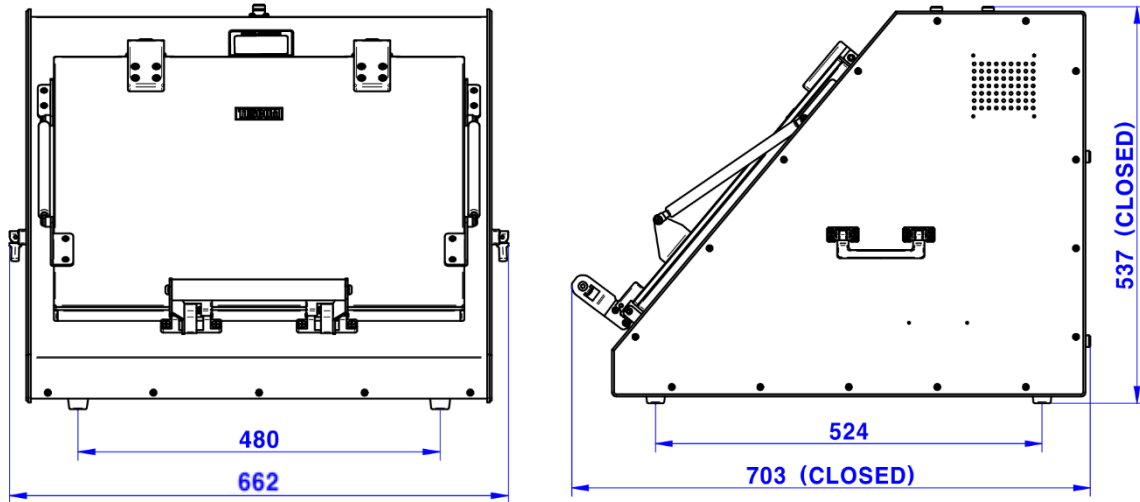
Dimensions

- TC-5970DU Inner Dimensions (WxDxH) : 544(W) x 546(D) x 425(H) mm



- TC-5970DU Outer Dimensions (WxDxH) : 662(W) x 703(D) x 537(H) mm, lid closed.

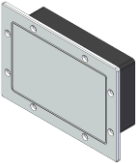
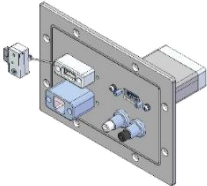
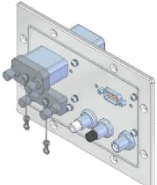




Ordering Information



Order Number	Description
TC-5970DU	Shield Box (including accessories below)
	Test Report

Pre-Configured I/O Interface Panels

I/O Interface Panel	Order Number	Configuration
	M07001A	<ul style="list-style-type: none"> Blank panel (with absorber)
	M07003A	<ul style="list-style-type: none"> One(1) USB 2.0 outside and inside One(1) USB 3.0 outside and inside One(1) RJ-45 outside and inside One(1) Banana Jack outside and inside
	M09009A	<ul style="list-style-type: none"> One(1) DB9(p) outside and DB9(s) inside, 100 pF pi filter One(1) USB 3.0 outside and inside One(1) RJ-45 outside and inside One(1) Banana Jack outside and inside One(1) DC Jack outside and inside

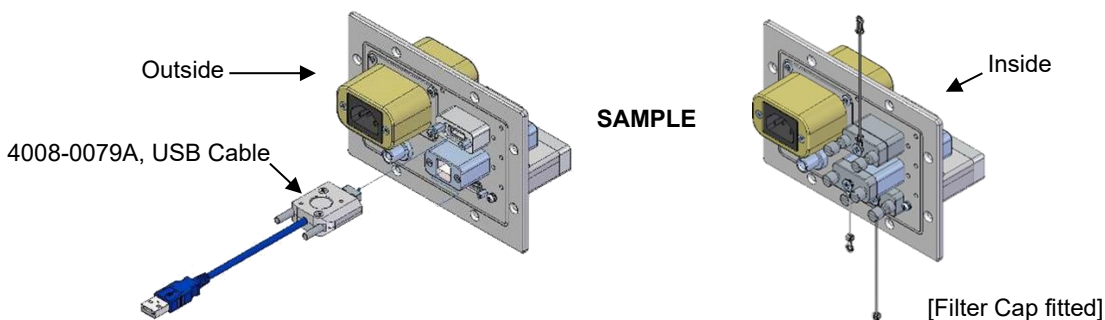
■ Custom RF Connector Panel





- Custom RF Connector Panel is available by selecting or combining the below RF Connectors.



RF Connector	Description / Order Number	Frequency Range / Impedance / V.S.W.R
	RF, N-SMA 4H Connector / 3407-0028	From DC to 18 GHz / 50 Ω / 1.3 max
	RF, SMA-SMA 4H Connector / 3408-0098	From DC to 18 GHz / 50 Ω / 1.3 max

■ 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.



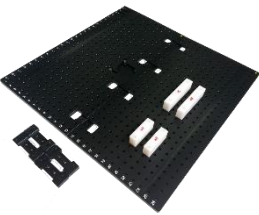
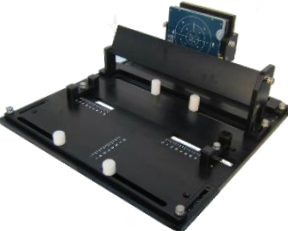

I/O Interface	Description / Order Number	Typical Data Rate / Line Voltage	Typical Shielding ^(*)
	USB 2.0 Filter / 3409-0018A-3 ^(a)	480 Mbps / 5 V, 500 mA / Max Current: 5 A	>60 dB from 0.5 to 2 GHz >70 dB from 2 to 3 GHz >70 dB from 3 to 6 GHz >70 dB from 6 to 12 GHz
	USB 3.2 Gen 1 Filter (Active) /3409-0042A-2 ^(a)	5 Gbps / 5 V, 600 mA / Max Current: 1.5 A	>80 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >75 dB from 3 to 6 GHz >55 dB from 6 to 12 GHz
	RJ-45 Filter / 3904-0296A	RJ45 Filter: 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 >60 dB from 6 to 12 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 >70 dB from 6 to 12 GHz

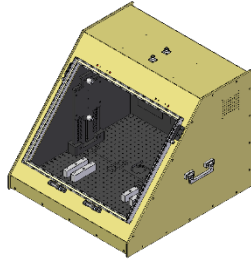
	DC Power Adaptor (Banana Jack Type) 3406-0005A-1 (Black) 3406-0006A-1 (White)	50 VAC, 10 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >80 dB from 3 to 6 GHz >70 dB from 6 to 12 GHz
	AC Power Adaptor / 3103-0009A	250 VAC, 7 Amps max	>70 dB from 0.5 to 2 GHz >80 dB from 2 to 3 GHz >80 dB from 3 to 6 GHz >70 dB from 6 to 12 GHz

- ^(a) : Exclusive cables should be used.
 (USB Cable, 4008-0079A, 2 M, USB 3.0 A(M) - USB 3.0 A(M), Housing: Aluminum)
- ***Typical Shielding** is an estimated value with I/O interface applied.
- The data above were measured by TESCOM standards, and they may be different depending on the measuring method and environment.

Fixture

- TESCOM offers standard grid fixtures that can change the position of DUT holding blocks. An optimal fit for different shapes of DUT can be made within seconds. Also, fully customized fixtures can be manufactured and supplied if necessary to meet the customer's demands.
- In addition to the fixture, various types of antenna coupler options can form an ideal measuring environment for characteristics of each DUT.

Fixture	Order Number	Description
	F59705A	<ul style="list-style-type: none"> • Antenna Coupler fixed type fixture • Antenna Coupler(Optional): TC-93026A • 280(W) x 390(D) x 52(H)mm
	F59709A	<ul style="list-style-type: none"> • Radiation Fixture (Table PC, Laptop, etc.) • Antenna Coupler(Optional): TC-93061A • 420(W) x 420(D) x 243(H)mm
	F597012A	<ul style="list-style-type: none"> • TC-5970 Top Fixture • Antenna Coupler(Optional): TC-93061A



F597014A

- 5970 Side Fixture
- Antenna Coupler(Optional):
TC-93061A
- 150(W) x 44(D) x 320(H) mm
- Requires F59705A Grid fixture
option

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE