



Concentric Technology Solutions Inc

Solutions for the Wireless Industry

TC-5910DU Shield Box



Features

- Reliable High RF Shielding from 0.1 GHz to 12 GHz
- Easy Opening/Closing
- Absorbing materials for stable measurement results
- EMI filters on all data ports and power lines
- Customizable I/O interface panels
- Shock absorber on the lid

Concentric Technology Solutions, Inc.

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Specifications

RF Specifications

Frequency Range 0.1 GHz to 12 GHz

*** Shielding Effectiveness (Typ.)**

0.1 GHz to 3 GHz	> 70 dB
3 GHz to 6 GHz	> 60 dB
6 GHz to 12 GHz	> 60 dB

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

Mechanical Specifications

Basic RF Connector None

Dimensions

Inside	142(W) x 243(D) x 134(H) mm
Outside	207(W) x 424(D) x 173(H) mm, lid closed. 435(H) mm, lid open.

Weight Approx. 7 kg

***Packing**

Size	370(W) x 460(D) x 280(H) mm
Weight	Approx. 8 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 inserted.

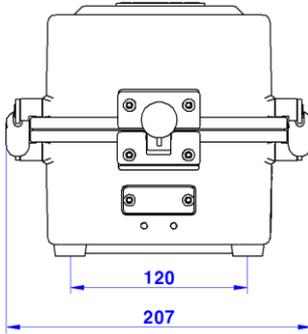
Frequency Range	Reflectivity (Typical)
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0.1 GHz to 3 GHz	3 dB
3 GHz to 6 GHz	6 dB
6 GHz to 12 GHz	10 dB

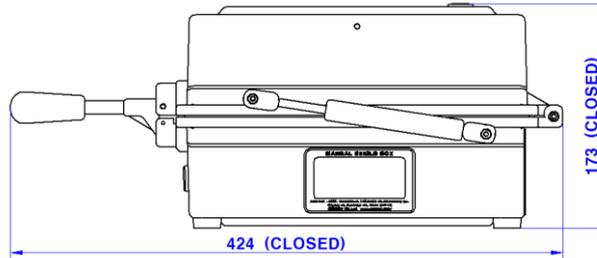


Dimensions

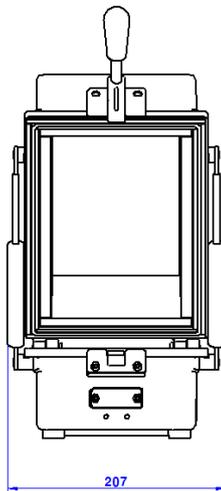
- TC-5910DU Outer Dimensions (WxDxH) : 207(W) x 424(D) x 173(H) mm



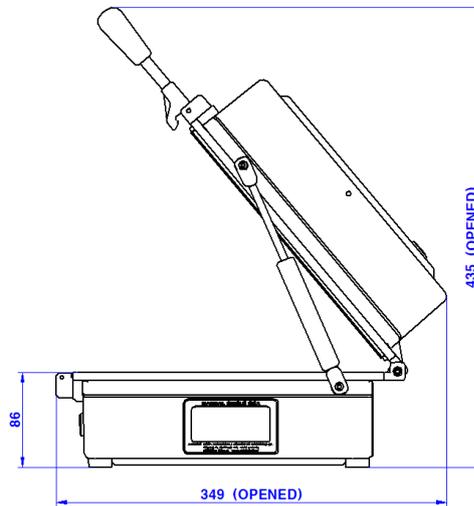
Front View (Closed)



Side View (Closed)

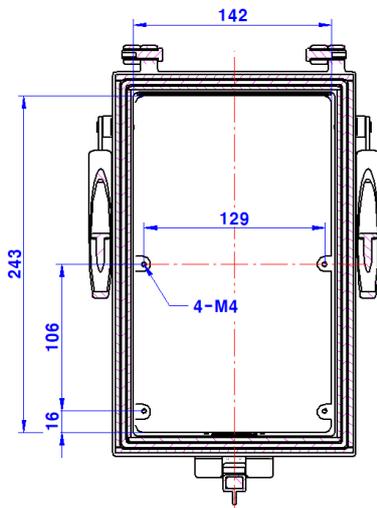


Front View (Opened)

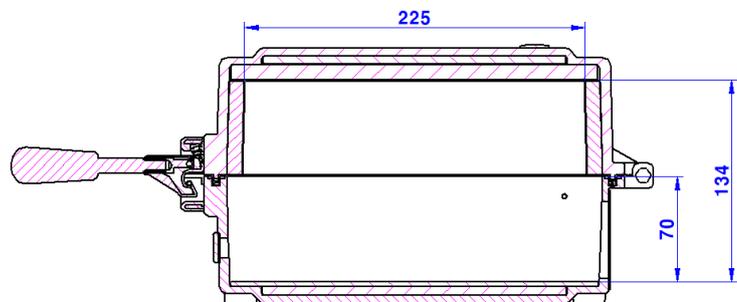


Side View (Opened)

- TC-5910DU Inner Dimensions (WxDxH) : 142(W) x 243(D) x 134(H) mm



Bottom Inner View



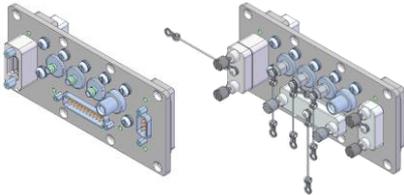
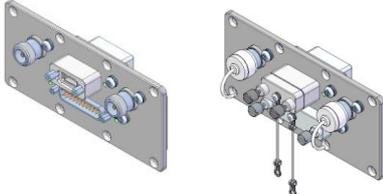
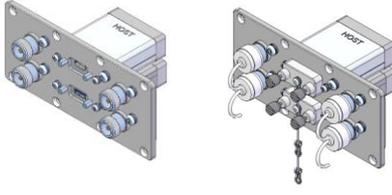
Side Inner View



Ordering Information

Order Number	Description
	Shield Box (including accessories below)
TC-5910DU	Test Report 4011-0144, RF Cable, SS-402, N(m) to N(m) 1 m, 1 pc

Pre-Configured I/O Interface Panel

I/O Interface Panel	Order Number	Configuration
	M01001A	<ul style="list-style-type: none"> • three(3) SMA (f) outside and SMA (f) inside • one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter • one(1) DB9(p) outside and DB9(s) inside, 100 pF Pi filter • one(1) USB 2.0 outside and inside • one(1) DC Power Jack Adaptor
	M01002A	<ul style="list-style-type: none"> • Two(2) N(f) outside and SMA(f) inside • one(1) DB25(p) outside and DB25(s) inside, 1000 pF Pi filter • one(1) USB2.0 outside and inside
	M01003A	<ul style="list-style-type: none"> • four(4) N (f) outside and SMA (f) inside • one(1) USB3.2 Gen1 Type-A outside and inside • one(1) USB3.2 Gen2 Type-C outside and inside

Custom I/O Interface Panel

■ 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 BH Connector / 3408-0100	From DC to 18 GHz / 50 Ω / 1.3 max
	RF, SMA-SMA BH Connector / 3408-0101	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 the CTS sales team.

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, Type-A Adapter (Active Type) /3409-0042A-2 ^(a)	5000 Mbps / 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
	USB 3.2 Gen 2, Type-C Adapter (Active Type) /3409-0046A	10 Gbps / 4 ~ 22 V / Max Current: 5 A	>70 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
	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 internal standards, and they may be different depending on the measuring method and environment.
- Shielding effectiveness is measured without any cables connected, so it may likely be affected when a cables are connected. Also, it may vary depending on the type of cable used.



Fixture

- CTS offers standard grid fixtures that allow changing the positioning of DUT holding blocks to enable optimal fit for different shapes or sizes of f DUT within seconds. Also, fully customized fixtures can be manufactured and supplied if necessary to meet the customer's requirements.
- In addition to the fixture, various types of antenna coupler options can be integrated into the fixture to form an ideal measuring environment for characteristics of each DUT.

Fixture	Order Number	Description
	F59106A	<ul style="list-style-type: none">• Antenna Coupler fixed type fixture• Antenna Coupler(Optional) : TC-93026A• 140(W) x 210(D) x 23.5(H) mm

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE