

TC-5916AU 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 line
- Customizable I/O interface panels
- Shock absorber on the lid

Specifications

RF Specifications

Frequency Range 100 MHz to 12 GHz

*** Shielding Effectiveness (Typ.)**

| | |
|------------------|---------|
| 0.1 GHz to 3 GHz | > 70 dB |
| 3 GHz to 6 GHz | > 70 dB |
| 6 GHz to 12 GHz | > 70 dB |

* 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 Two(2) N (f) outside and SMA (f) inside

Dimensions

| | |
|---------|---|
| Inside | 328(W) x 298(D) x 206(H) mm |
| Outside | 399(W) x 473(D) x 239(H) mm, lid closed. 495(H) mm, lid open. |

Weight Approx. 10 kg

***Packing**

| | |
|--------|-----------------------------|
| Size | 460(W) x 530(D) x 340(H) mm |
| Weight | Approx. 11 kg |

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

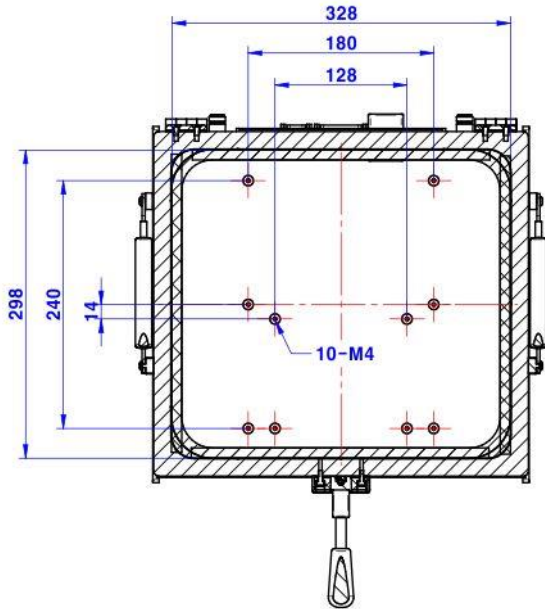
Absorber Reflectivity

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

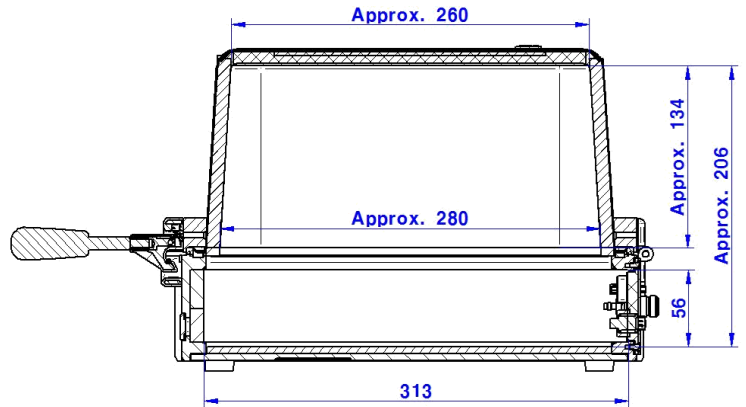
| Frequency Range | Reflectivity (Typ.) [dB] |
|------------------|--------------------------|
| 0.5 GHz to 3 GHz | 3 dB |
| 3 GHz to 6 GHz | 6 dB |
| 6 GHz to 12 GHz | 10 dB |

Dimensions

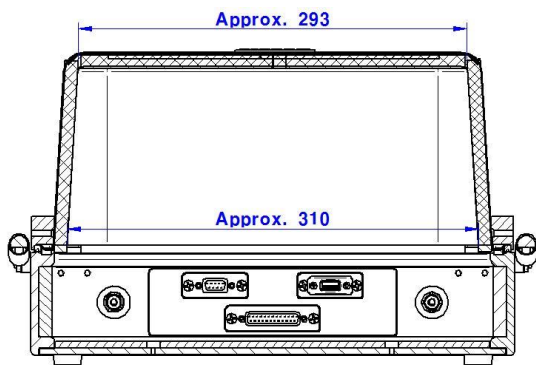
- TC-5916AU Inner Dimensions (W×D×H) : 328(W) × 298(D) × 206(H) mm
(Internal dimensions may vary by lot.)



Bottom Inner View

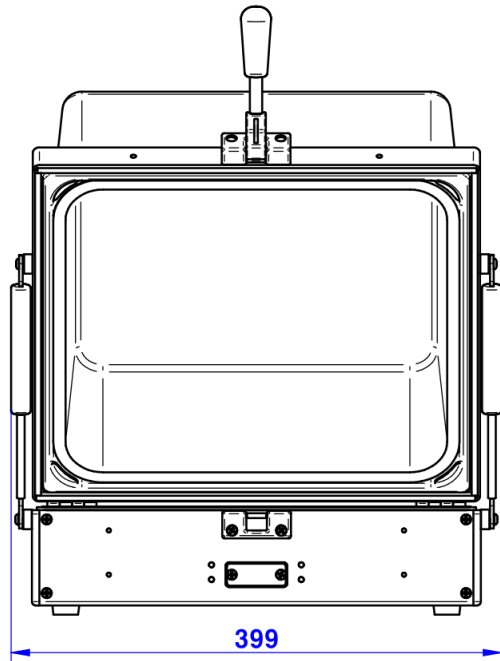


Side Inner View (Closed)

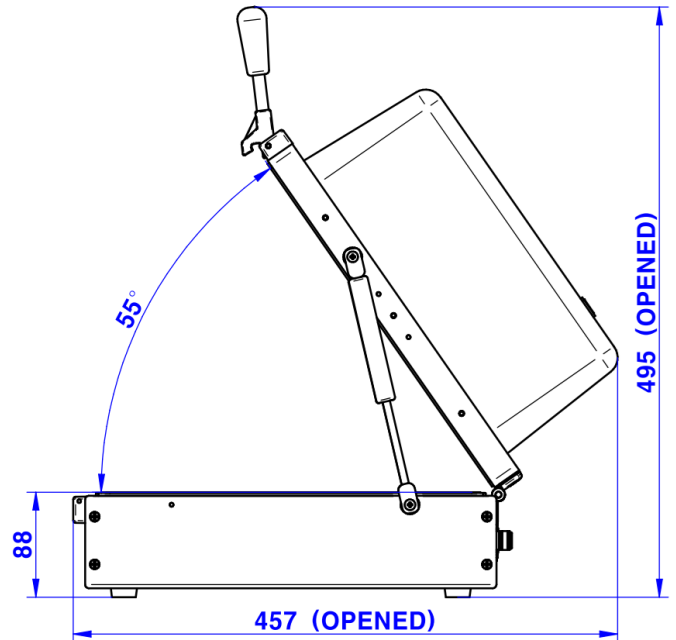


Rear Inner View

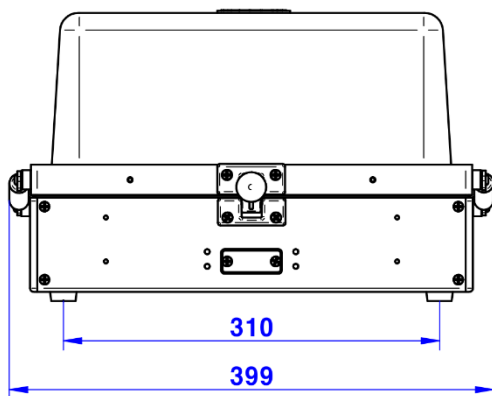
- TC-5916AU Outer Dimensions (W×D×H) : 399(W) × 473(D) × 239(H) mm, lid closed.
 495(H) mm, lid open.



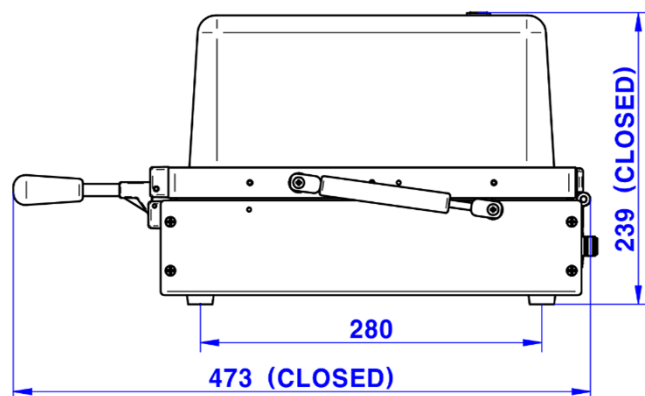
Front View (Opened)



Side View (Opened)



Front View (Closed)




Side View (Closed)

Ordering Information

| Order Number | Description |
|--------------|---|
| TC-5916AU | Shield Box (including accessories below) Test Report |


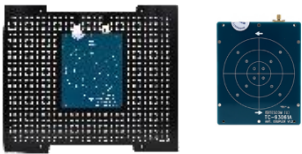
Optional I/O Interface Panel

■ Pre-Configured I/O Interface Panel

| I/O Interface Panel | Order Number | Configuration |
|---|--------------|-----------------------------|
|  | TBD | Blank Panel (with absorber) |



Optional Antenna Coupler 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.

| Antenna Coupler | Order Number | Configuration |
|---|--------------------------------|--|
|  | Grid Fixture(TBD) TC-93160A | Antenna Coupler fixed grid fixture <ul style="list-style-type: none"> • Antenna Coupler(Optional): TC-93160A <ul style="list-style-type: none"> - Frequency range: 6 GHz ~ 12 GHz - RF connector type: SMA female • RF Cable: 4011-0123 <ul style="list-style-type: none"> - Frequency range: DC to 18 GHz - SS-405, SMA(M) R/A -SMA(M) R/A, 80 cm |
|  | F59166A TC-93061A | Antenna Coupler fixed type grid fixture <ul style="list-style-type: none"> • Antenna Coupler(Optional) : TC-93061A <ul style="list-style-type: none"> - Frequency range: 800 MHz ~ 6 GHz - RF connector type: SMA female • RF Cable: 4011-0076 <ul style="list-style-type: none"> - Frequency range - SS-405, SMA(M) - SMA(M), 50 cm |







■ 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 3.1 Gen 1 Filter (Active) / 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 |
|  | 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.
- Each shielding effectiveness is measured without any cable, so it will be likely affected when a cable is connected. Also, it may vary depending on the type of cable.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE