

70db isolation integrated 4-chamber stack.

The CT840a-stack4 is an integrated stack of 4 RF Chambers, used to isolate WiFi and other RF equipment from the outside environment. This allows more repeatable testing options. In addition, when combined with RF attenuators and WiFi traffic generators, chambers can be used to create emulated mesh and mobility scenarios, including the TR-398 automated test suite. RF signal isolation is about 70db, which means strong outside signals may be seen weakly inside the RF chambers. The large DUT chamber has a 2D turntable. Two smaller chambers on top are for WiFi Mesh nodes. The medium chamber on the bottom holds LANforge WiFi test equipment. A full complement of RF filters and SMA ports are included in the base price, and modular design allows new filters to be added easily.

Larger Images: [CAD](#) [CAD Stack](#) [Diagonal](#) [Front](#) [Right Side](#) [Left Side](#) [Bottom](#) [Top](#) [Back](#) [All-Sides](#) [With-Equipment](#)

NOTE: This product may have a different hardware configuration than the system pictured above.
Refer to your official quote for details.

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Hardware Specification

1. Integrated 4-Chamber RF Shield stack with 2D turntable.
2. Isolation: 70+ dB [Example Isolation Test Results](#)
3. Frequency(GHz): 0.8 to 8GHz
4. Standard Interfaces: 20-60x SMAs, USB 3.0, USB-C, 3x 10G Ethernet, RF Coax, Fiber, fan, DC power, universal A/C power strip. Other options available.
5. RF Absorber material: -10dB to -20dB [RF Absorber spec sheet](#).
6. [Directional Antenna Spec Sheet](#)
7. Includes built-in 2D turn-table with software automation support.
8. Outside Dimension(mm): 1190(W) 965(D) 1950(H) Inches: 47(W) 38(D) 77(H)
9. Weight: 347kg 765 pounds
10. Working Temperature: Normal room temperature

Additional Feature Upgrades

Unless otherwise noted in the product description, these features usually cost extra:

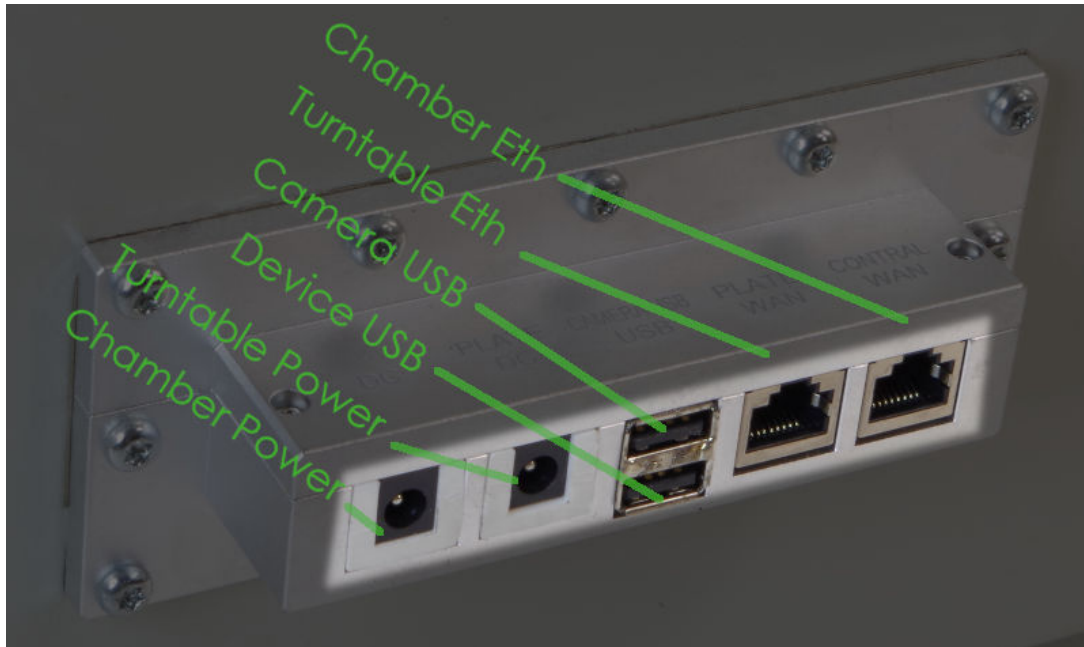
- Compare with [other Chamber offerings](#)
- LANforge WiFi test systems and automation software.
- Programmable Attenuators
- RF Splitter Combiners and cables
- Different Interface options are available

1.

Configuring the CT840a Turntable Chamber

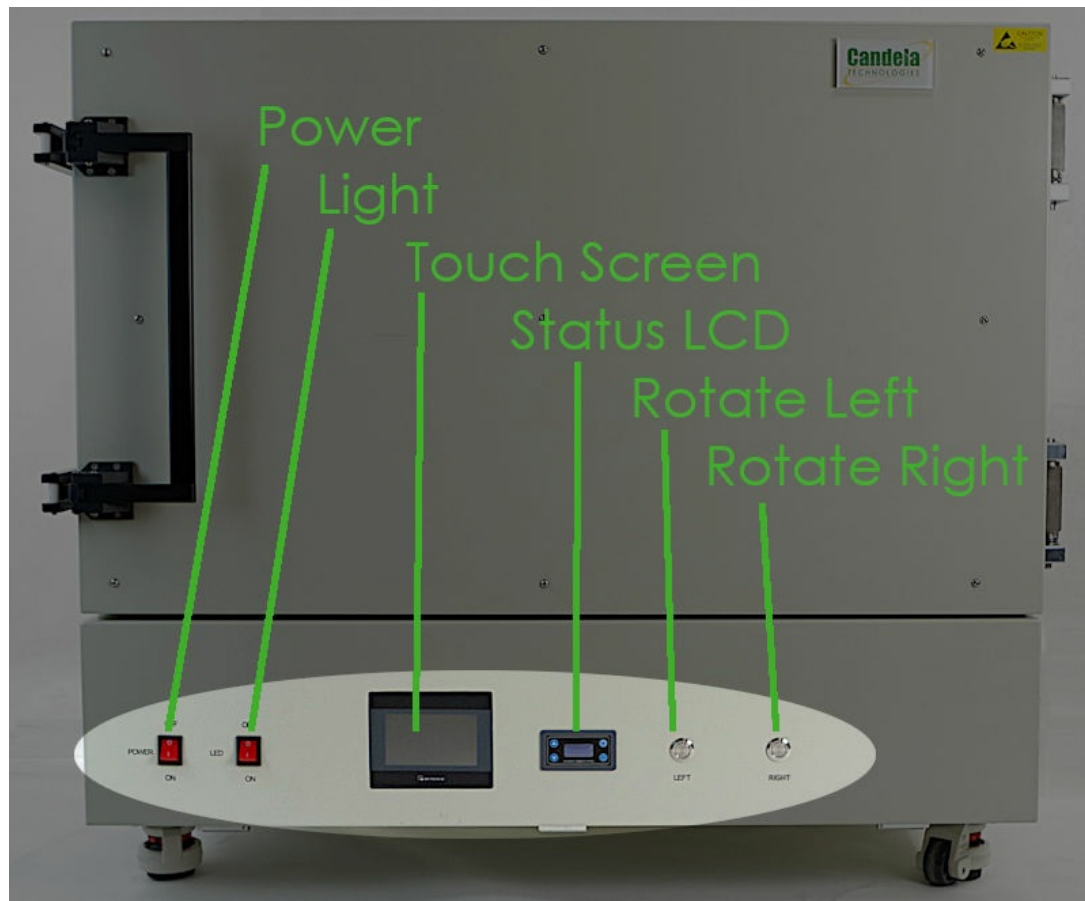
- A. The CT840a requires a network connection. Plug an Ethernet cable into the **Control LAN** port at the bottom rear of the chamber.

Depending on the date manufacture, these ports might be labeled differently.



- A. The chamber controller and lights are powered via AC cords at the outside bottom rear of the CT840a chamber.
- B. The **Chamber Power** or *DC* port is for 12v or other power required by devices inside the chamber. This runs below the turntable.
- C. The **Turntable Power** or *Plate DC* port is for a 12v or other power required by the DUT on the turntable. This is run up to the top of the turntable.
- D. Accessories or DUTs can be cabled to the **Device USB** port, or *USB* port.
- E. The USB camera has a dedicated USB port, **Camera USB** or *Camera USB* port.
- F. Below the turntable is an Ethernet jack for the DUT to use. That comes out at the **Turntable Eth** or *Plate LAN* port. It should be run up to the top of the turntable with the 12v power cord.
- G. The chamber controller is accessed on the network via the **Chamber Eth** or *Control LAN* port.

B. Use the front touch screen to set an IP address

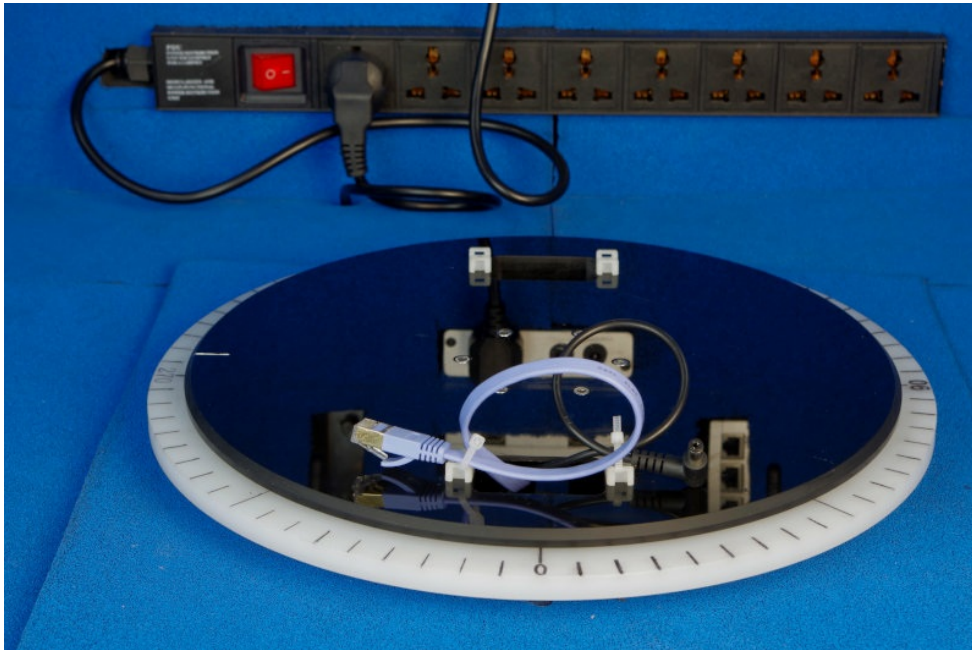


C. Make sure you can ping the chamber from your laptop and/or the machine running LANforge server. The LANforge server will communicate over the network to the *Chamber Eth* port.

D. The rear ports are all accessory ports for the chamber.



A. 120v AC cord for internal power strip.

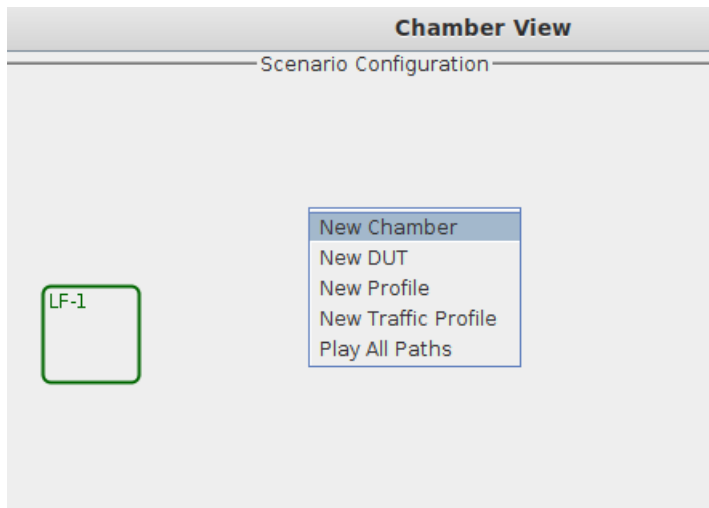


- I. This power plug provides power to the chamber modbus controller and the chamber lights.
- II. The turn table power cord plugs into the power strip.
- B. Pass-through DC barrel connectors. Use these for 12v (or other) power needed by devices in the chamber.
- C. SMA connectors. Seal these with terminators when not in use.
- D. Ethernet ports
- E. USB 3-A and USB C port
- F. Type F Coax port. Seal this with terminators when not in use.
- G. Fiber-optic pass-through. Seal this with screw-caps when not in use.

2.

Configuring the Chamber in LANforge

A. In the *Chamber View* window, right-click on the main window and select **New Chamber**



B. You will see the *Create/Modify Chamber* window.

C. Select the chamber and turntable type:

A. For *Chamber Type*, select **2D Large**

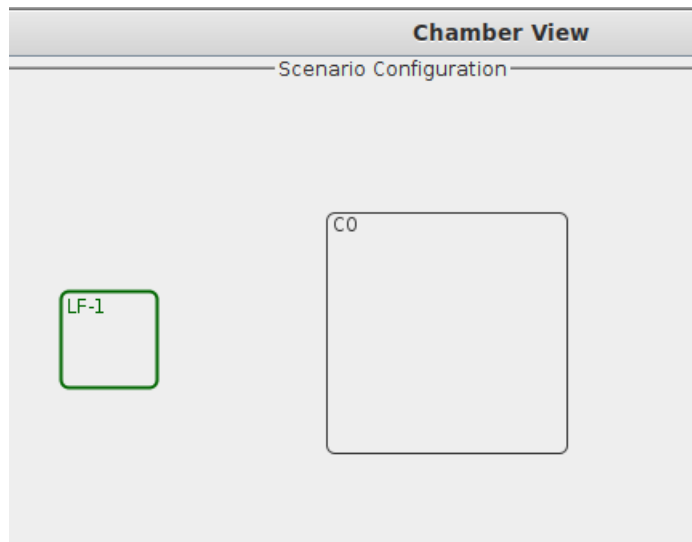
B. For *Turntable Type*, select **CT840A**

C. For *Turntable*, put in the IP address of the chamber

D. Select your LANforge server resource that manages the turntable

E. Click **OK**

D. You will see a new chamber, **C0** in the *Chamber View* window.



E. In the *Chamber View* window, right-click on the chamber **C0** and select **Modify**

F. Use the *Speed* and *Position* fields to adjust the turntable.

Speed (rpm)	<input type="text" value="0.0"/>
Position (deg)	<input type="text" value="0.0"/>

G. Click **Apply** to send the configuration.