

# 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

List Price: \$47,000 List Price with 1 Year support (17%): \$54,990

#### **Additional Feature Upgrades**

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

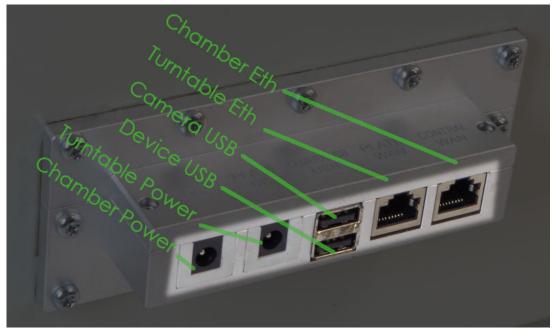
- Compare with other Chamber offerings
- LANforge WiFi test systems and automation software.
- Programmable Attenuators
- RF Splitter Combiners and cables

1.

### Configuring the CT840a Turntable Chamber

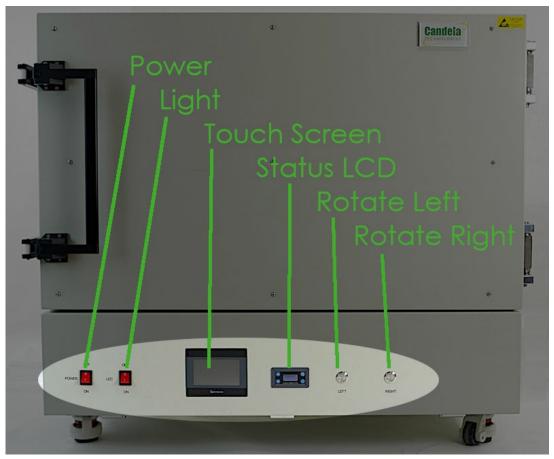
A. The CT840a requires a network connection. Plug an Ethernet cable into the **Control LAN** port at the bottom rear of the chamber.

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 **Turnable 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 **Turnable 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.

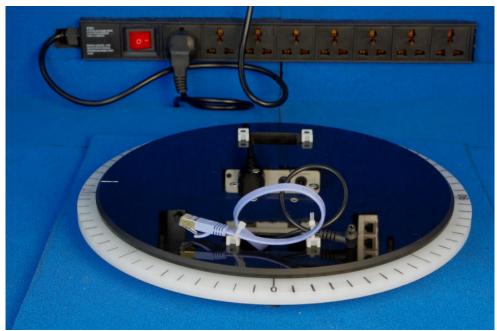
B. Use the front touch screen to set an IP address



- 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

Scenario Configuration	Chamber View				
	Scenario Configuration				
New Chamber					
New DUT					
LF-1 New Profile					
New Traffic Profile					
Play All Paths					

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

Create/Modify Chamber								
Name:	<auto create="" name="" new=""></auto>	Width:	150	Height:	150			
Chamber Type	Unknown (0)	Isolation	80	Speed (rpm)				
Furntable Type	CT850A (0)	Turntable		Position (deg)		Tilt (deg)		
Managed By:	None			🗌 Virtual	🔲 Open			
DUT-1	<b>•</b>	DUT-2	-					
DUT-3		DUT-4	-					
ANforge-1	None	LANforge-2	None					
ANforge-3	None	LANforge-4	None					
nt CX A	Int CX B	Int Atten	Ext CX A	Ext CX B	Ext Atten	Atten Floor	Zero-Atten RSSI 2.4Ghz	Zero-Atten RSSI 5Ghz
-	-	-		-	-	Cable (100 ddB) 🔻	None (0 ddB)	None (0 ddB)
-		-		-	<b>•</b>	Cable (100 ddB) 🔻	None (0 ddB)	None (0 ddB)
-		<b>~</b>		-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
-		-	-	-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
-		-	-	-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
-		-	-	-	-	Cable (100 ddB) 🔻	None (0 ddB)	None (0 ddB)
-		-	-		<b>•</b>	Cable (100 ddB) 💌	None (0 ddB)	None (0 ddB)
		-		-	<b>•</b>	Cable (100 ddB) 💌	None (0 ddB)	None (0 ddB)
-		-		-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
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-		-		-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
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-		-		-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
-				-	-	Cable (100 ddB) 👻	None (0 ddB)	None (0 ddB)
Sync Apply OK Cancel								

C. Select the chamber and turntable type:

0		
Name:	Chamber-0	١
Chamber Type	2D Large (3) 🗸 🗸	ŀ
Turntable Type	CT840A (2) 🗸	٦
Managed By:	<custom> CT850A (0)</custom>	1
DUT-1	ComXim (1)	٦
DUT-3	CT840A (2)	C

- A. For Chamber Type, select 2D Large
- B. For Turntable Type, select CT840A
- C. For *Turntable*, put in the IP address of the chamber

Create/Modify Chamber					
Name:	Chamber-0	Width:	150	Height:	150
Chamber Type	2D Large (3)	<ul> <li>Isolation</li> </ul>	80	Speed (rpm)	0.0
Turntable Type	CT840A (2)	Turntable	192.168.100.10	Position (deg)	0.0
Managed By:	1 (vm-48e4)	<ul> <li>Turntable Rpt: Posit</li> </ul>	ion: 0.0 Tilt: 0.0 RPM: 0.0		Π,

D. Select your LANforge server resource that manages the turntable

•					
Name:	Chamber-0	Width:	150	Height:	150
Chamber Type	2D Large (3)	<ul> <li>Isolation</li> </ul>	80	Speed (rpm)	0.0
Turntable Type	CT840A (2)	<ul> <li>Turntable</li> </ul>	192.168.100.10	Position (deg)	0.0
Managed By:	l (vm-48e4)	<ul> <li>Turntable Rpt: Positi</li> </ul>	on: 0.0 Tilt: 0.0 RPM: 0.0		<b></b>

E. Click **OK** 

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

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

0.0

Position (deg)

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