

Product Catalogue

Network Testing and Emulation Solutions

Candela
TECHNOLOGIES



Wi-Fi Mesh



TR-398 Issue 4



CI/CD Automation



AP Testing (TaaS)



Cell Emulator + Wi-Fi



Wi-Fi Test House



Wi-Fi Station Testing



Interop



DFS Testing



Network in a Box



Wi-Fi 7

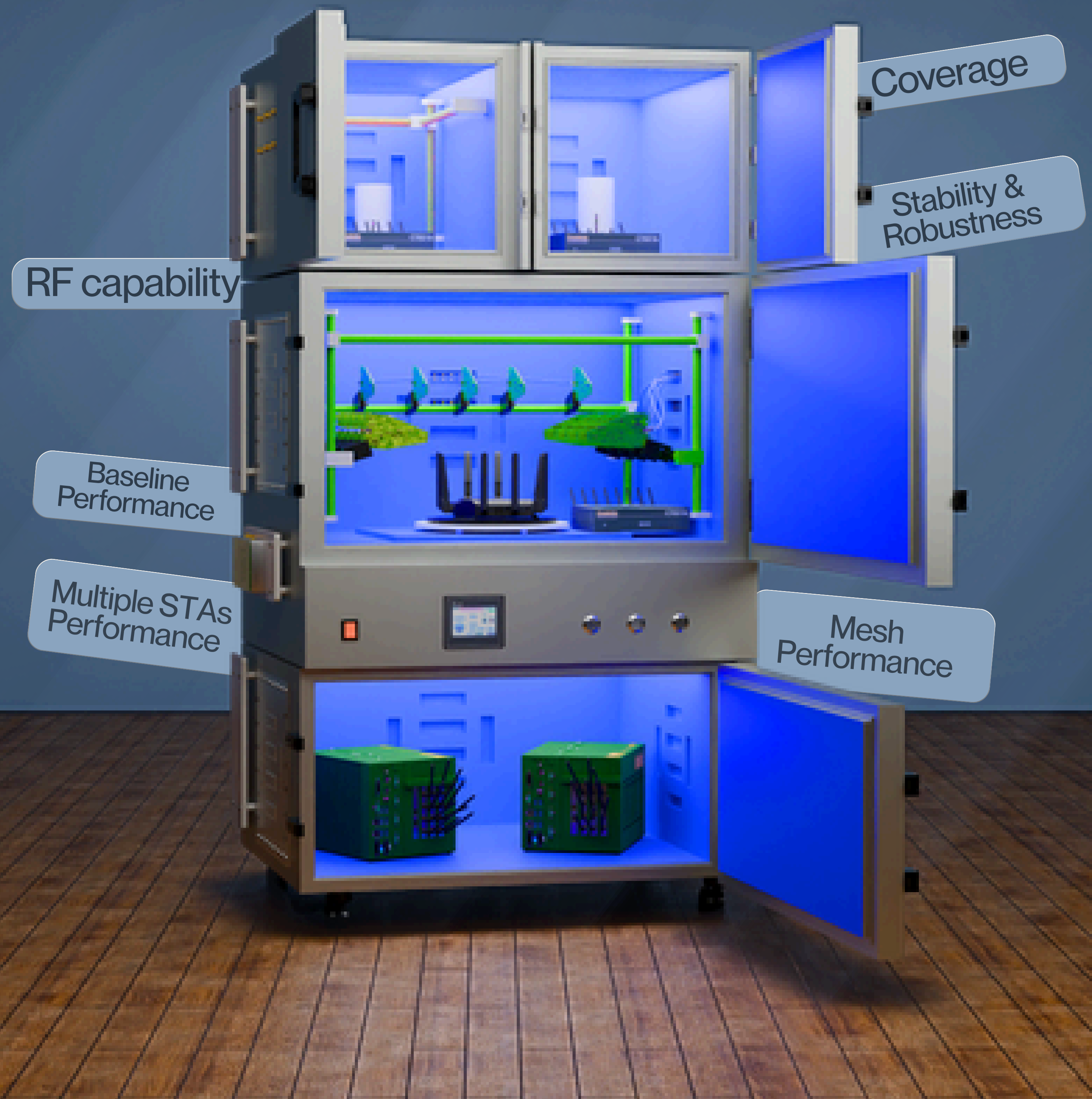


Wi-Fi BT Coexistence

TR-398

Testing

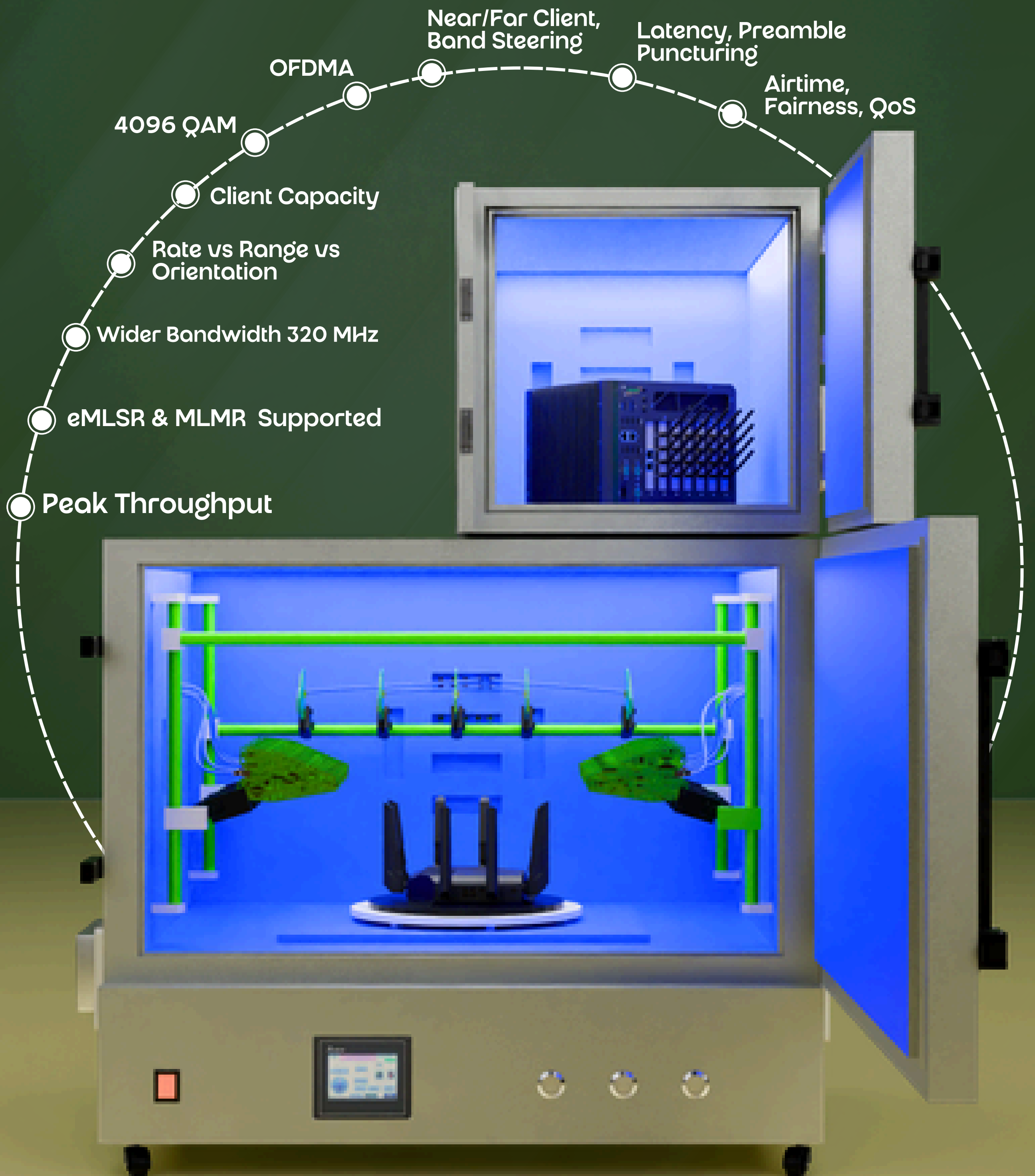
Candela Technologies offers a fully automated TR-398 Issue 4 test system. All the required test hardware, including multi station emulator, traffic generator, RF enclosures, turntable, programmable attenuators, and fully automated test software along with PASS/FAIL results are provided in a packaged, easy to use and affordable solution. This testbed offers additional testing opportunities, including OFDMA, MU-MIMO and MLO.



Wi-Fi -7

Testing

500+ CLIENTS TESTING SOLUTION



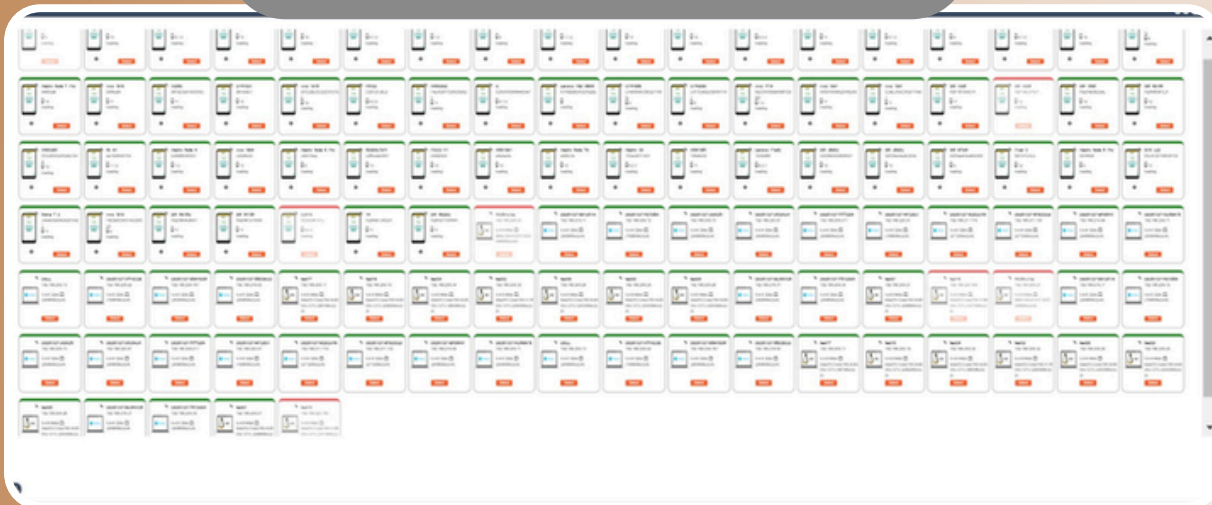
Interop/real deviceTesting



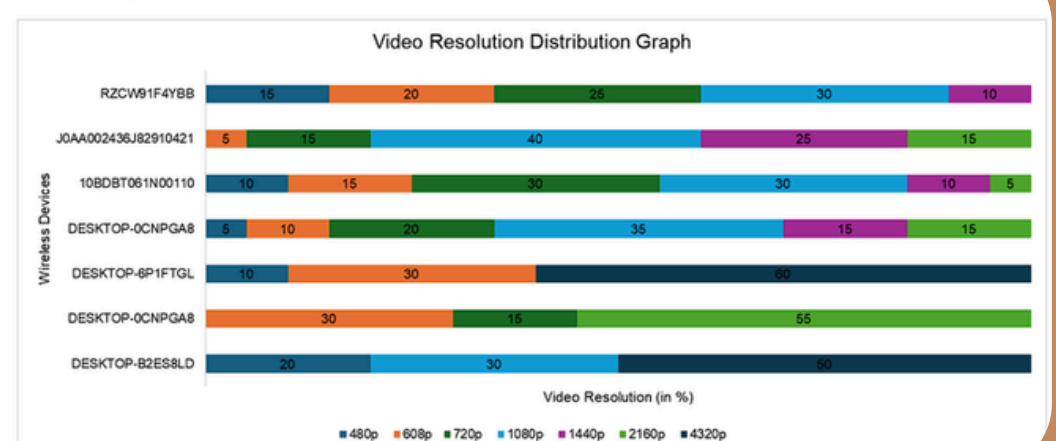
Testing Apps



Devices Dashboard



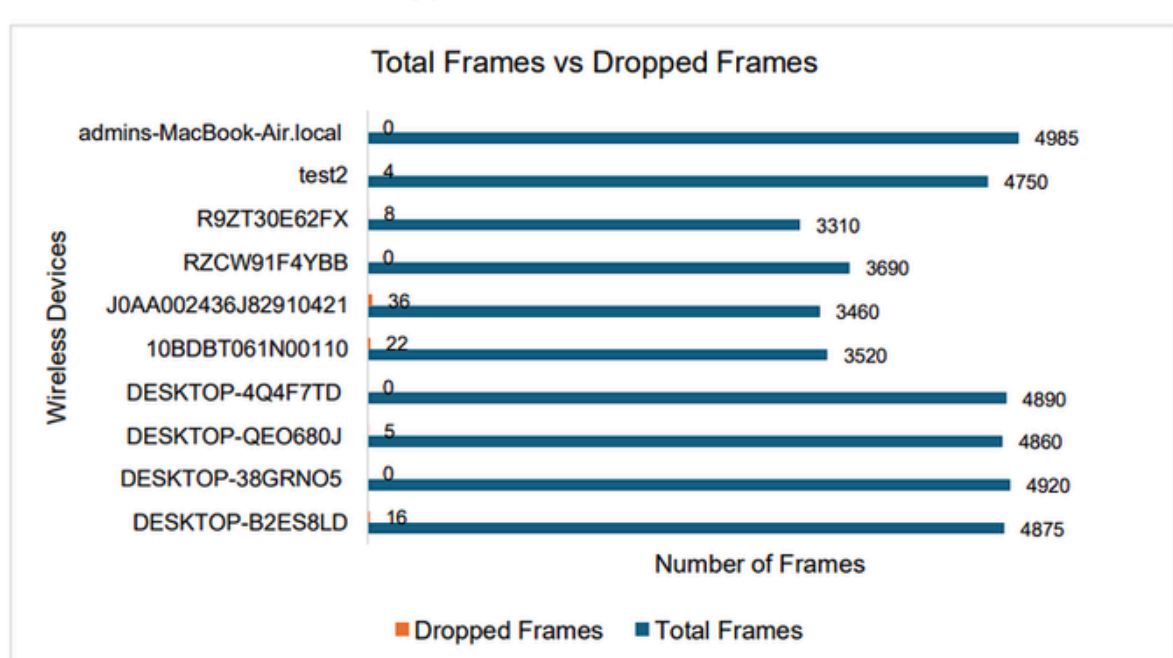
Video Playback Resolution Distribution Across Wireless Devices



Real Application Testing

- Netflix Streaming
- YouTube Shorts
- Instagram Reels
- Zoom/Teams call

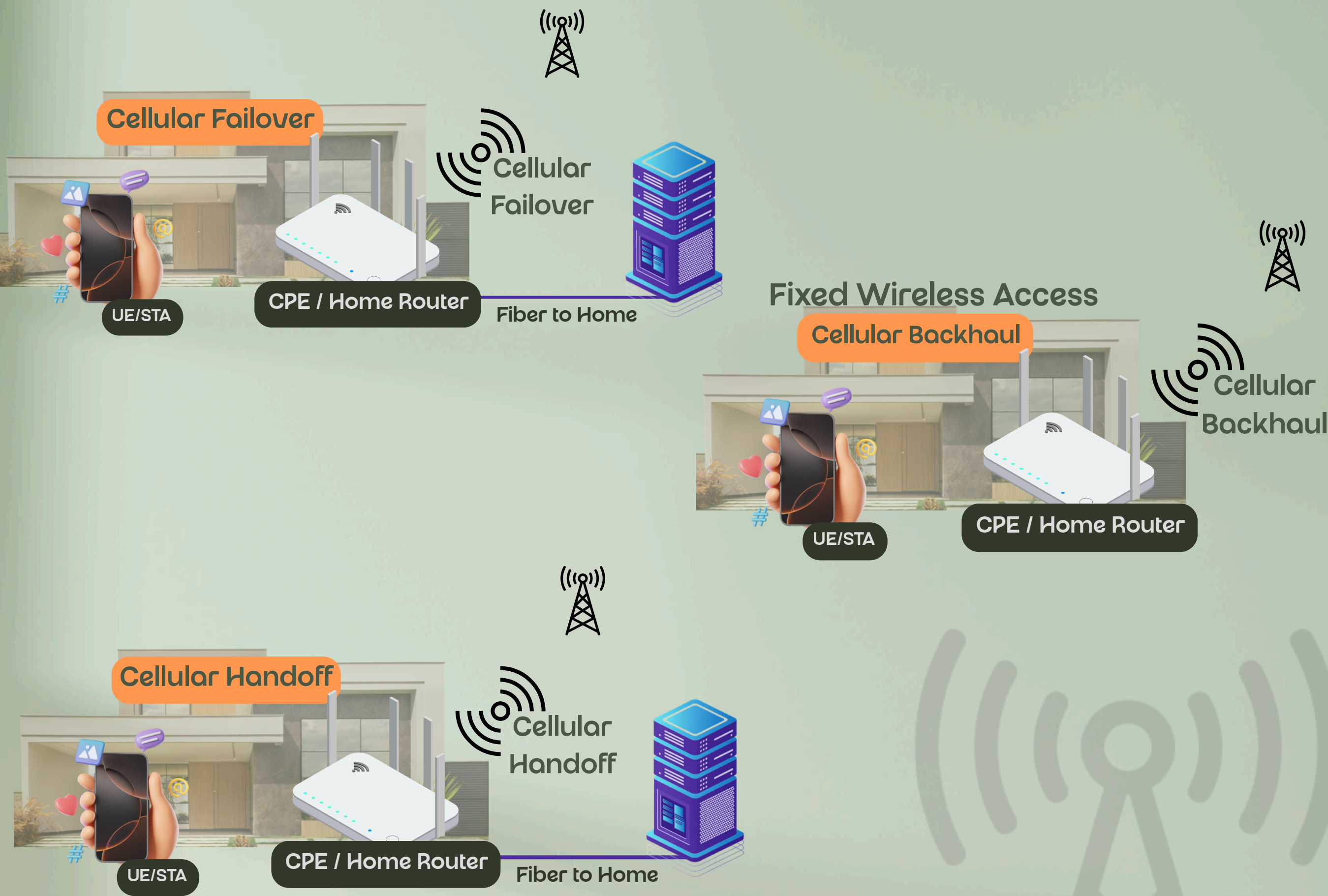
Total Frames vs Frames dropped



- Performance Test
- Ping Test
- Web Browser Test
- Video Streaming Test
- FTP File Transfer

- HTTP File Transfer
- Mixed Traffic Test
- QoS Test
- Multicast
- Rate Vs Range
- Interoperability Test

Cellular + Wi-Fi Testing



Candela Wi-Fi
station emulator/
Traffic Generator

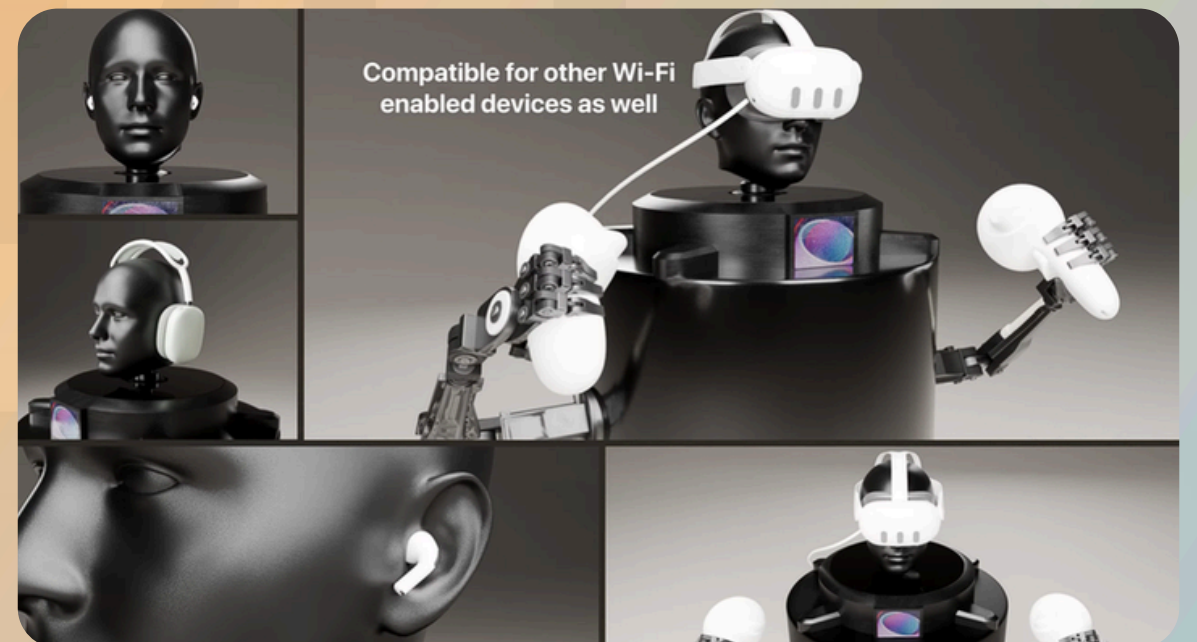
Device Under Test
with Cellular Backhaul and Ethernet Backhaul

Candela
Cell Emulator

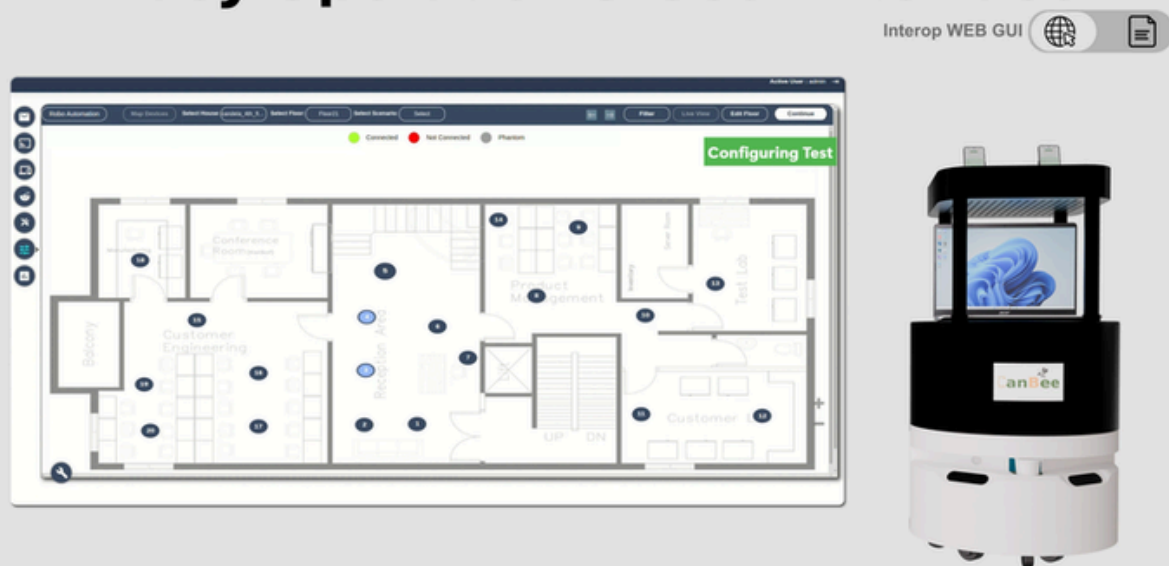


CanBEE

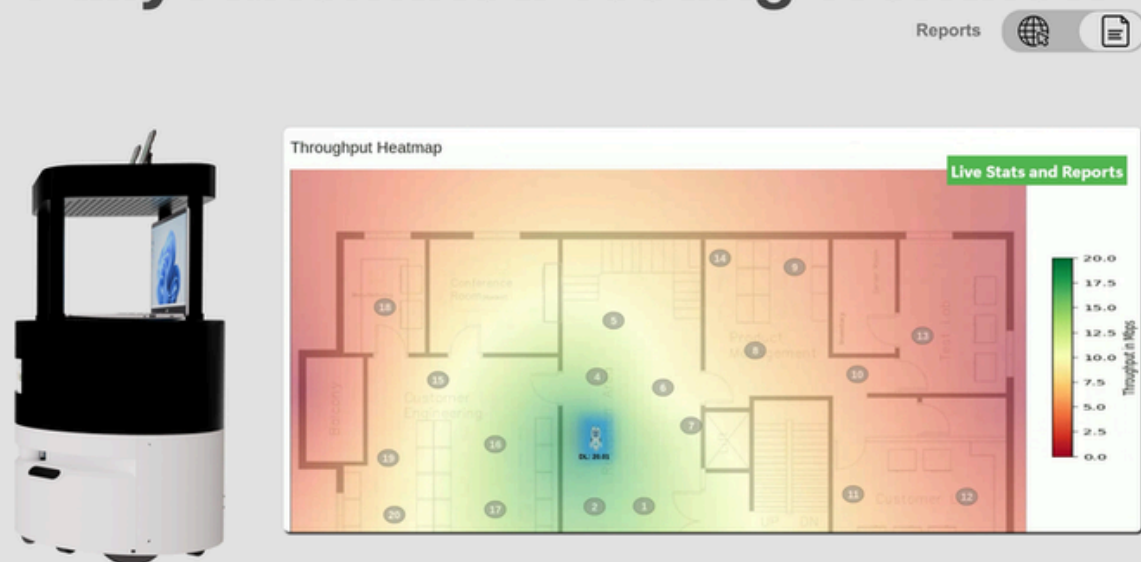
Test House Automation Robot



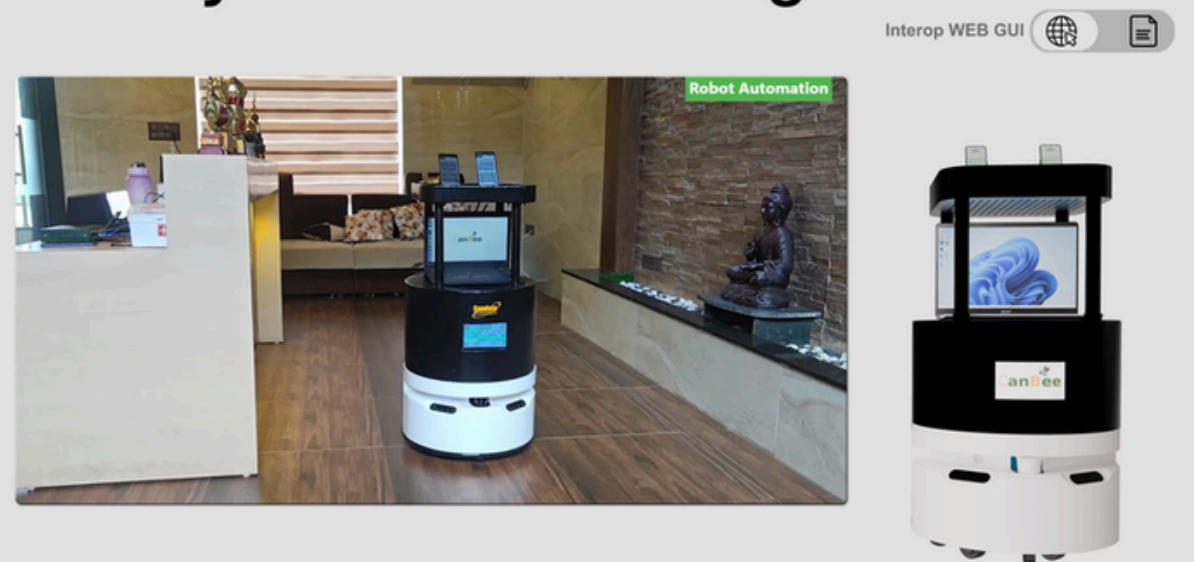
Easy Operation & User Interface



Fully Automated Testing Workflow



Fully Automated Testing Workflow



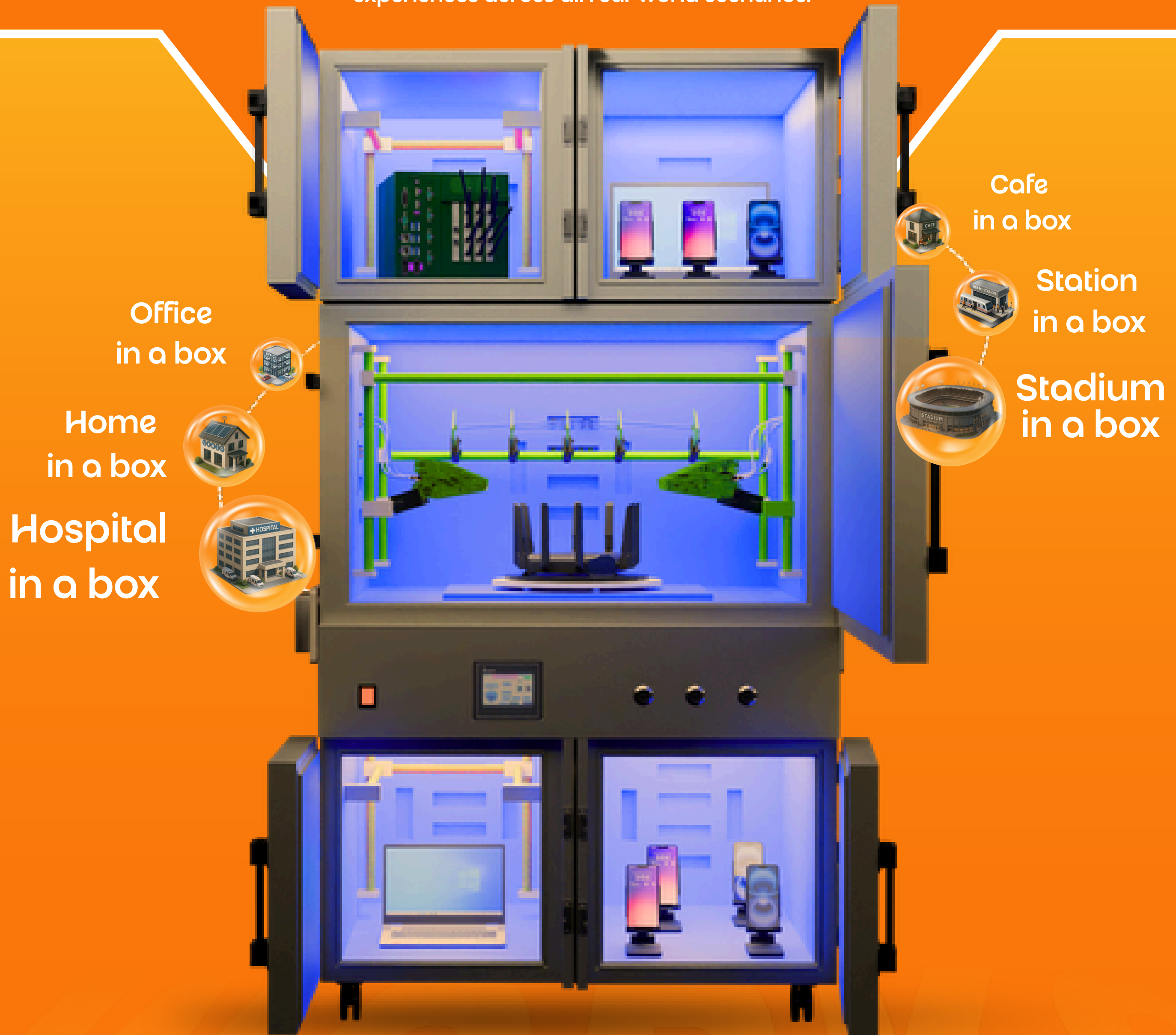
Networks in a box

User Centric, Quality of Experience

In the Network in a Box setup, User Experience testing uses real devices—smartphones, laptops, tablets, smart TVs, and IoT devices, to evaluate how users experience applications under realistic conditions.

By simulating multiple clients, traffic types, and simultaneous device usage, testers measure streaming smoothness, call quality, gaming responsiveness, and IoT reliability.

This approach helps identify network bottlenecks, optimize configurations, and ensure consistent, high-quality experiences across all real-world scenarios.



BLUForge



Tx Power ranging
-40 dBm to +8 dBm



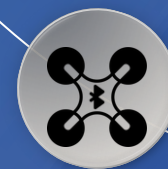
300+ Advertisements
per second



Supports all 4 BLE
PHY rates



BLE interference across
40 channels



IoT Device Testing



UNIFIED IoT MANAGEMENT PLATFORM

Candela Technologies introduces the IoT Solution – a seamless integration platform that brings all connected IoT devices under a single LANforge Dashboard. From one central interface, users can view, monitor, and control all Wi-Fi-connected IoT devices in real time. This enables configuration of device counts, toggle delays, and iteration limits for automated stress and latency testing.



DFS Testing

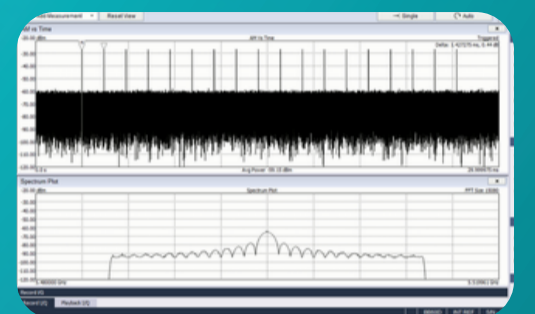
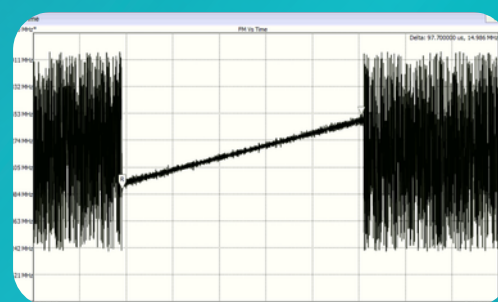


By emulating authentic radar pulse patterns, we validate an access point's ability to detect and respond to radar signals under real-world conditions.

This ensures accurate and timely channel switching to maintain compliance with Dynamic Frequency Selection (DFS) regulations.

Our testing covers multiple regional DFS standards, verifying detection probability and switching latency. The result is a comprehensive evaluation of wireless devices' radar awareness and coexistence performance.

1. Detection Bandwidth Test
2. Detection Probability Test



FCC

ETSI

CHINA

JAPAN

KOREA



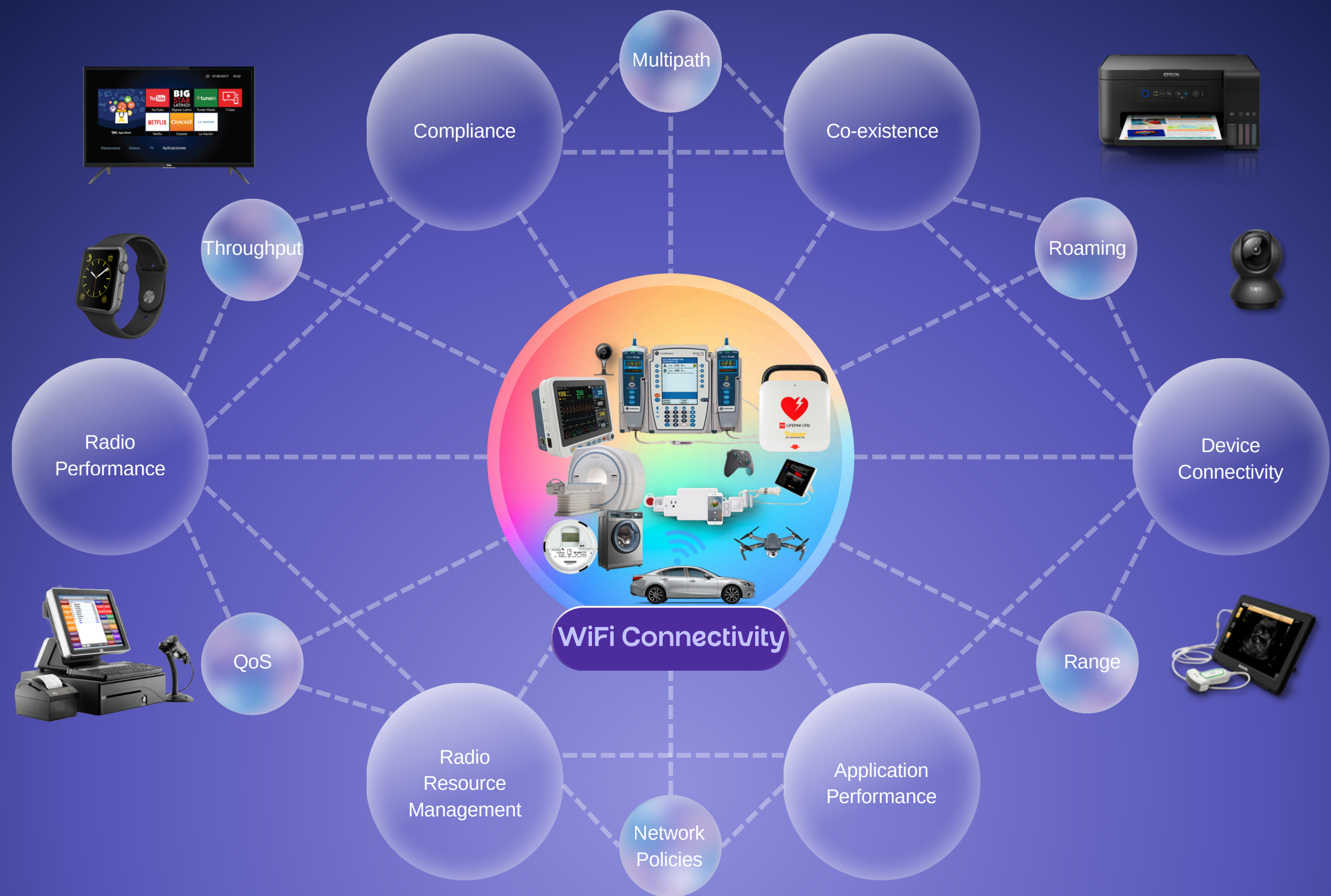
3D Turn Table

360° Antenna Testing

The 3D Turntable System offers precise dual-axis rotation with full spatial control, enabling effortless angle adjustments via an intuitive web dashboard – perfect for automated antenna testing, calibration, and 3D visualization.



Station Side Testing



Router Compatibility Test



Wi-Fi STA vendors that make WiFi consumer electronics, printers, scanners, medical equipment, gaming devices, video cameras etc...can now test how compatible their devices are with the most common WiFi routers found in homes all around the world using our fully automated Wi-Fi router compatibility testbeds.

CI/CD AUTOMATION TESTING



AI

Powered LANforge Test Automation LANforge Manager webGUI

The Next Generation WiFi 7 Validation Platform



 Automated LANforge Solution End-to-end WiFi testing with minimal manual effort	 Interactive Web UI Intuitive dashboard for test execution, monitoring, and reporting	 WiFi 7 Testing at Your Fingertips Launch validation, performance, and interoperability tests in just a few clicks	 Agentic AI Powered Autonomous AI agents with interactive natural language processing to generate tests, analyze logs, troubleshoot issues, and retrieve insights.
 Real-Time Client Visualization Live topology, client status, traffic flow, roaming, and network insights	 Advanced PCAP Analysis AI-assisted packet inspection and intelligent root cause analysis	 Modern Reporting & Analytics Interactive dashboards, AI-generated summaries, historical trends, and exportable reports	 Scalable Multi-Testbed Management Centralized management of multiple LANforge systems with concurrent test execution and monitoring

Testing as a Service

- AP Capabilities Validation
- Client Connectivity
- Single Client Peak Throughput Test
- Throughput Test with Different PDUs
- IPv4/IPv6 Performance Test
- Client Capacity Test
- Ethernet Wired Throughput Test
- Wi-Fi Client Reset Test

- MAC ACL Enforcement
- Rate vs Range Test
- Dynamic Frequency Selection (DFS)
- Interference Testing (ACI/CCI)
- OFDMA Throughput Test
- MU-MIMO Downlink Performance
- Multi-Link Operation (MLO) Performance Test
- 802.11r Fast Roaming

- Enterprise Security
- Captive Portal Validation
- Coverage
- Rate vs orientation
- High Stress Test (48 Hours+)
- Scale Test (500+ Clients)
- Wi-Fi 7 validation
- Band steering



Testhouse Testing



Zoom Audio Quality



Online Gaming Lag



Zoom Video Quality



Online Gaming Ping Latency



Wi-Fi Campus Network Testing



2,500+ Clients

in 61,000 sq. ft.
with 70+ APs

Campus Environment Overview



- Pre-Release real world Validation
- 2,500+ Concurrent Real Clients
- Multi-OS Device Coverage
- Automated Roaming Tests
- Daily Performance Insights
- Issue Detection & Logging
- Weekly/Monthly Reports
- Enhanced User Experience

Campus Network Deployment Overview





CT-521b

2-radio 802.11a/b/g/n/ac/ax/be
Low end system (Max throughput
1Gbps Mbps)



CT-523c

upto 306 clients WiFi 7 clients
suitable for EMLSR, MLMR,
Preamble puncturing, Peak
Throughput etc.,



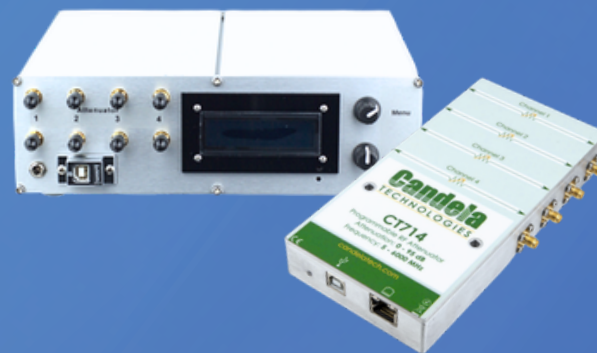
CT-527

7 slots chassis,
500+ Wi-Fi 7 Clients



CT-521-at7-ext

Tri-Band Tri-Concurrent WiFi-7
4x4 MIMO WiFi suitable for
functional testing.



Programmable Attenuators

0-95dB attenuation,
0.5dB steps, 50MHz-8 GHz

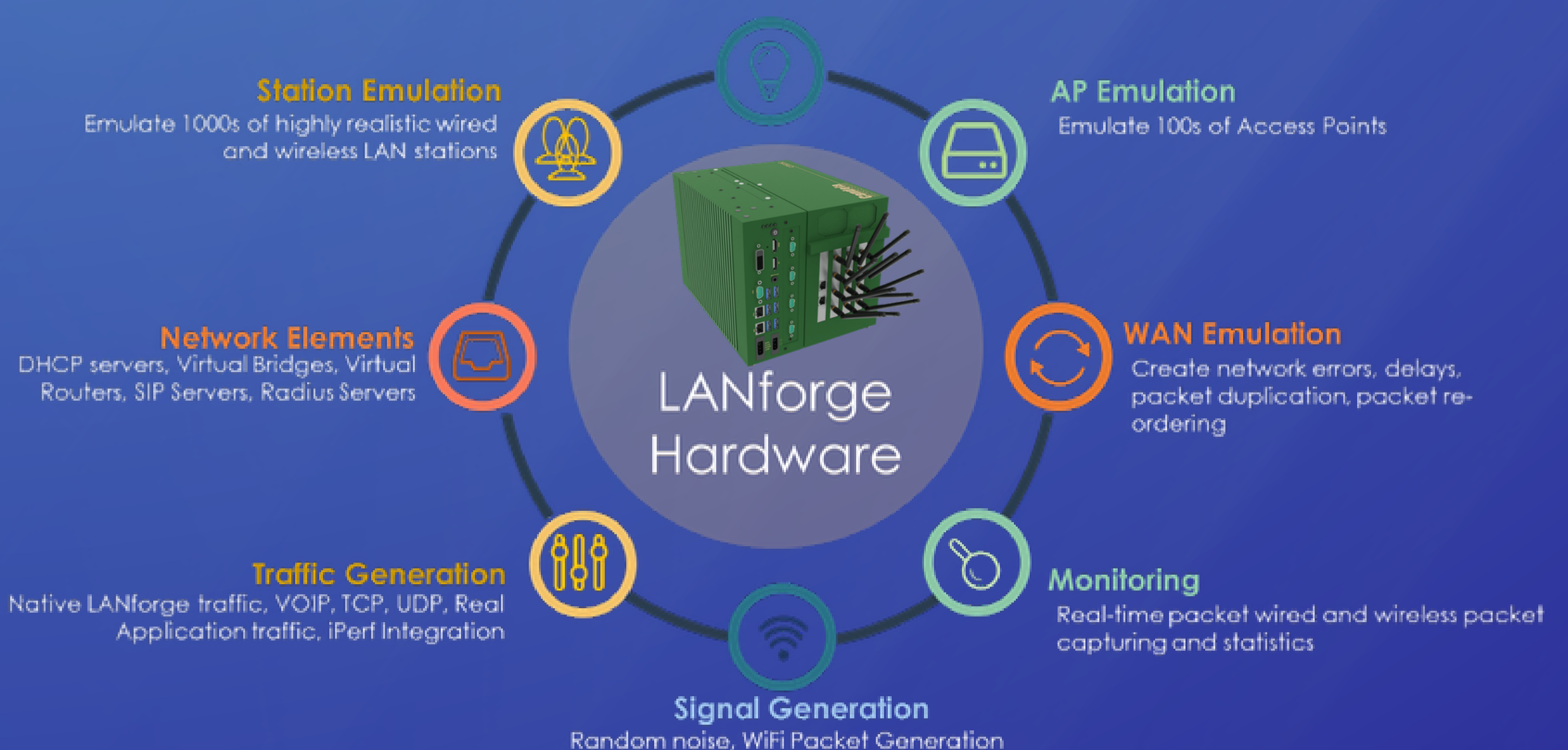


Radar Signal Generator

Radar Pulses, Noise and
Signal Generation, All
WiFi channels supported.

Cables, Splitters, Antennas, Adapters

Semi-flexible RF cables
(various sizes), 4x1, 2x1 and
8x1 splitter, all varieties of
adapters and antennas



RF enclosures



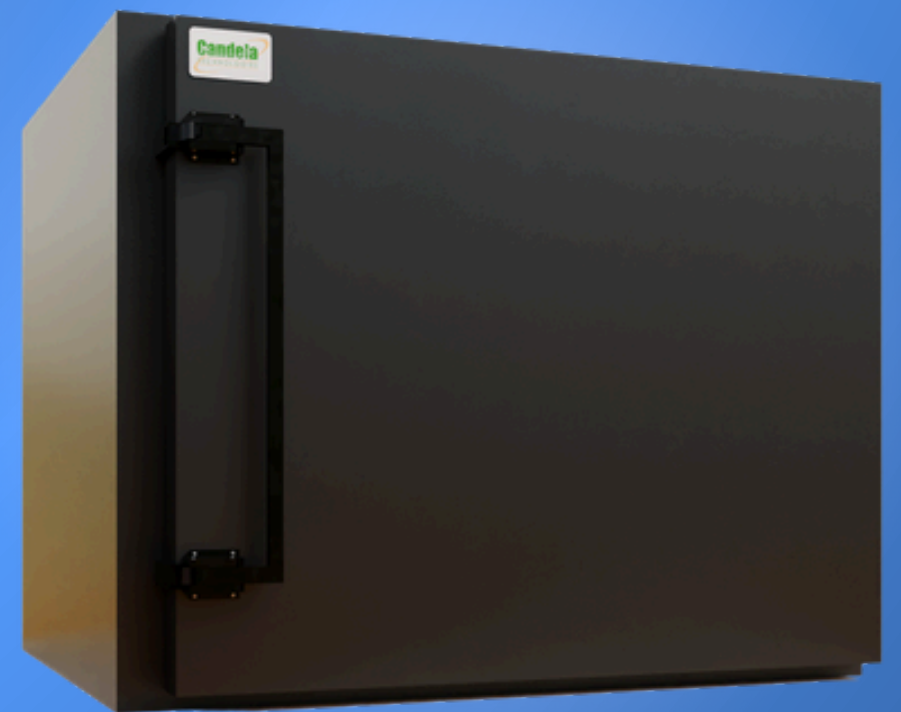
CT867c

85+dB RF chamber with galvanized iron and stainless steel construction.



CT820c

Medium sized affordable 70+dB isolation RF Chamber. Often plenty in stock in US warehouse and short lead time.



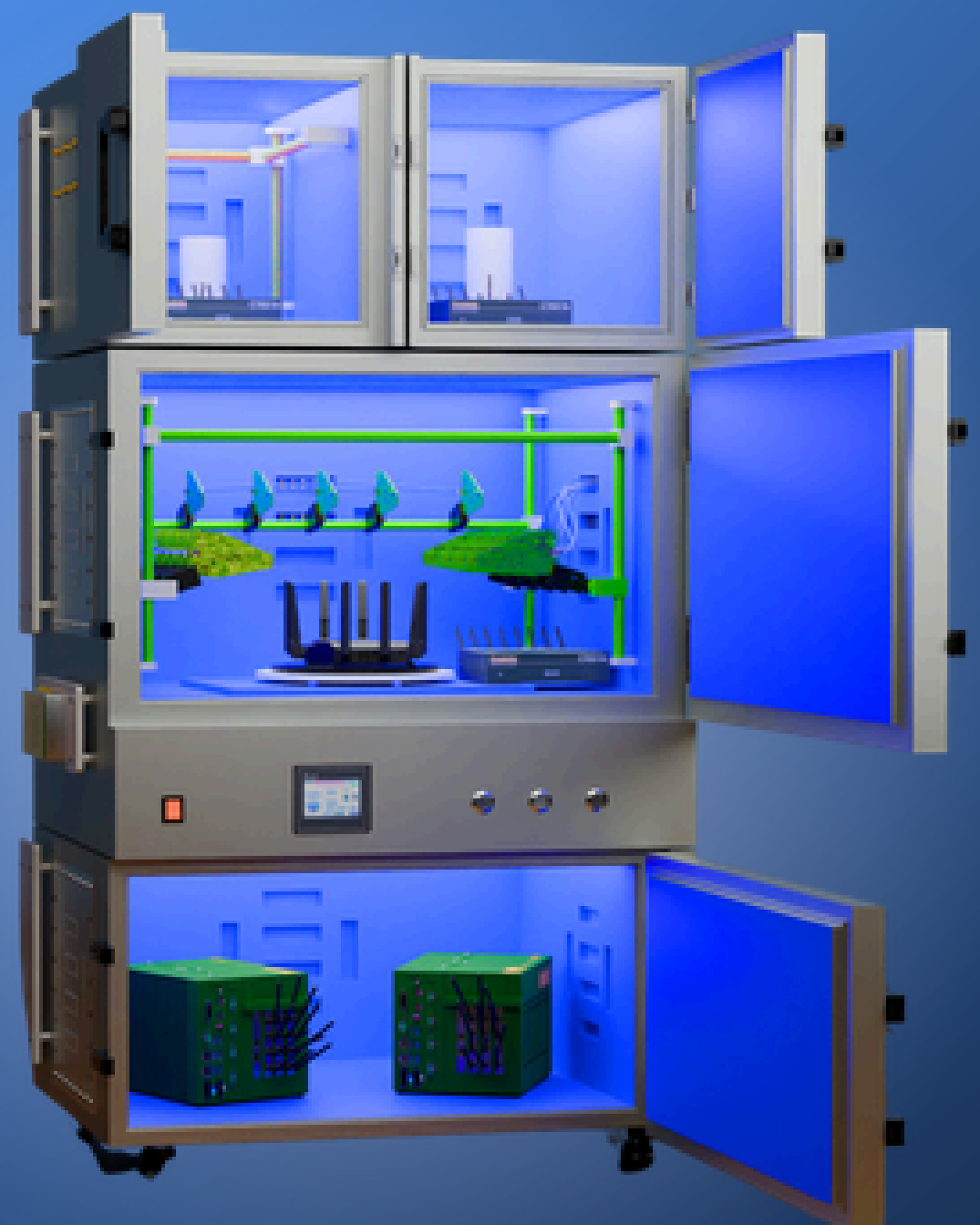
CT840c

Large RF Chamber with 2D turntable



CT840c -stack5

High Isolation Large 2D turntable
RF Chamber



CT840a-stack4

High Isolation Large 2D turntable
RF Chamber

Our Happy Customers

- Facebook/Meta
- Apple
- SpaceX
- Google
- Comcast
- Qualcomm
- Commscope
- Amazon
- Microsoft
- QACafe
- Vantiva
- Ubiquiti
- CACI
- Adtran
- Cisco
- Citrix
- NetApp
- Starry
- Sony-san-Diego
- Raytheon-IIS
- Sierra Wireless
- Telus
- Panasonic
- AT&T
- Rogers
- Shasta
- Arista
- Juniper/Mist
- Pacstar
- PaloAlto
- Somos
- Charter
- At&T
- CenturyLink
- Bright House
- Lumen
- Rogers
- Videotron
- Chamberlain
- Oracle
- Telnet networks
- Cable Labs/Kyrrio
- Imco-manassas
- Qnet
- Verizon
- Haivision
- GogoAir
- Sony
- Net experience
- ViaSat
- Assured Networks
- Sterling
- Unwired
- Tessco
- Action
- SmartRG
- Tactical Coms
- magic leap
- Brinker
- Oceaneering
- Cradlepoint
- Lockheed
- Nielsen
- Thales
- Veea
- FCS
- LDC
- Cisco
- Ddsoftware
- Optus
- Bell
- Case point
- tierney-strachan
- sos-software.com
- Matthew Sheldon
- Rockstar games
- Nortek-control
- chevron.com
- Onemediallc
- sea-machines.com
- Sky UK
- Tele2
- Vodafone
- SFR
- PLAY
- Bouygues Telecom
- Virgin Media
- Ekinops
- Samsung
- FreeBox
- Altice
- Samsung
- Cellcom
- Vestifi
- smart-e-tech.de
- NordicLAN
- rdt.co.il
- Intel
- Intelsat
- Dyson
- Dejero
- Philips
- Net Module
- Deutsche Telekom
- Dekra
- Telefonica
- Harman
- Airtel
- Reliance
- Amazon
- Intel
- Vantiva
- Altran
- HFCL
- Boeing
- Netgear
- Qualcomm
- Cambium
- Arista
- Commscope
- Ruckus
- Aricent
- Cisco
- Comcast
- Relay2
- NetApp
- TataElxsi
- Thinkpalm
- C-DOT
- Quantum
- Indio
- Nokia
- BEL
- Verizon
- Juniper
- GX Group
- Macrotech
- OpenMynz
- Sony
- True Wireless
- 3BB
- FPT
- AIG
- TOT
- Huawei
- Watchguard
- Sercomm
- Hitron
- WNC
- TCL
- Edge Core
- Qualcomm
- Samsung
- LGU+
- Commscope
- Belkin
- Optus/Singtel
- NPT
- Axon-Networks
- D-Link
- Askey
- Foxconn
- Optus



Wireless Test Solutions for the connected world

- TR-398
- Networks in a Box
- Cell Emulator + WiFi
- WiFi Station Testing
- CI/CD Automated WiFi Testing
- Bluforge - BLE Noise Emulator
- Testhouse Automation Robot
- Wi-Fi Campus Network Testing
- WiFi-7
- Real device Interoperability
- WiFi Test House
- Testing as a Service
- IoT Device Testing
- Router Compatibility Test
- DFS Testing
- Wi-Fi HaLow

