WTT – 127A

WIRELESS THROUGHPUT TESTER

SYSTEM DESCRIPTION:

WTT-127A Wireless Throughput Tester is a small form-factor low cost anechoic chamber that comes fully integrated with a built-in turntable, 2 isolation shield enclosures for Client AP (2.5G & 5GHz), signal interference filters, programmable RF attenuators and an OTA (over the air) conduction port. The solution is shipped ready to test throughput in both Over The Air & Conductive modes with flexibility to perform other wireless performance parametric testing.

The WTT-127A is a compact and inexpensive alternative to conventional anechoic chambers. It is delivered ready to use and tests throughput vs range simulating realistic use conditions. Software controls the test applications including wireless path loss data throughput. The WTT-127A assists in the development of WiFi solutions, provides QA engineers with a method of validation and shortens the development cycle through improved test productivity.
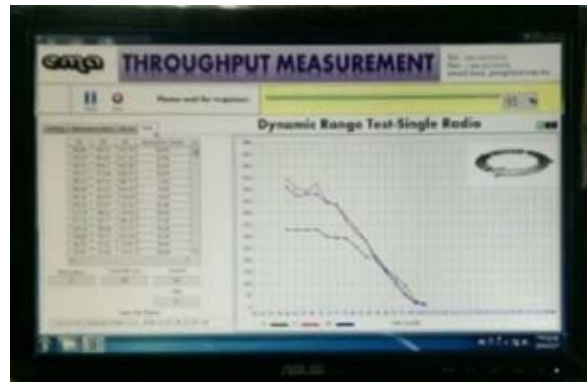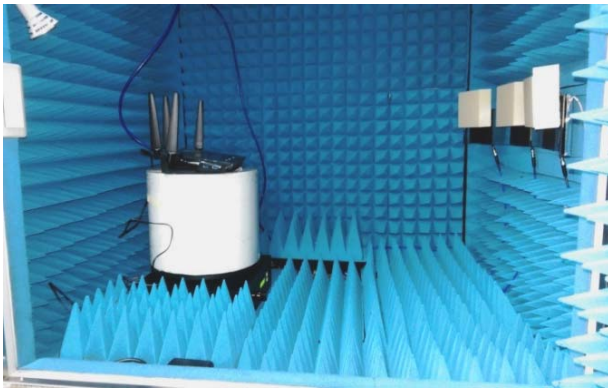
MAIN APPLICATIONS:

- Wireless **Access Point**, Wireless Devices (IEEE802.11,a/ac/b/g/n WiFi device)
- WiFi-AP Over the air Throughput testing -2.5GHz, 5GHz and 2.5+5GHz Combined Model
- WiFi-AP Conductive throughput testing -2.5GHz, 5GHz and 2.5+5GHz Combined Model
- Wireless Device Throughput Measurements - 2.5GHz, 5GHz and 2.5+5GHz Combined Model

KEY FEATURES:

- 2GHz – 6 GHz Frequency Range (upgrade size of enclosure for lower frequency of 700MHz)
- Capable of Performing: OTA & Conductive Throughput Measurements
- Shield Isolation > 100 dB Typical (EUT test chamber & Client AP shield Box). Total isolation with selected I/O filter connected condition > -65 to -85dB (frequency dependent)
- 80 cm Signal Path Length (Receiving Antenna to EUT antenna standard solution)
- DUT Turntable (Positioner): 0-360° 1° steps
- User Selectable I/O Ports: Standard equipped solution includes 8 SMA Connectors, 2 LAN (giga port) connectors, RS-232, AC Power filter and Air-flow honey comb vent & Cooling Fan
- Equipped Dual Band Antennas (2.5G & 5GHz) x 4 (supports IEEE802.11,a/ac/b/g/n)
- ETF-198 programmable RF attenuator (box) with OTA & conduction port. Path loss table factors included, Attenuation - Range: 0 to -135db, Attenuation - Resolution: 1db/ step
- Operates with **IxChariot** throughput measurement Software (customer to source)

- Client AP (2.5GHz & 5GHz) --(customer to source)
- Compatible with any client AP (allows for easier set up and TCP/IP changes)
- User friendly GUI with test adaptable operation setting to speed up test process, includes automated report output
- Faster test time compared to other similar systems
- System setup performed by installation engineer along with user training within 1 day
- Freestanding mobile cart configuration for easy set up, deployment and portability
- Standard size: 1270mm (W) x 1200mm (L) x 1950mm (H)

WTT-127A SYSTEM SPECIFICATIONS

ELECTRICAL SPECIFICATIONS				
Model	Electrical (VAC)	Frequency (Hz)	Total Current (Max)	Power Plug Type
WTT-127A	100 to 240 VAC	50/60 Hz	15 A	NEMA 5-15P plug
AC Power line filter	100 to 240 VAC	50/60 Hz	9 A	NEMA 5-16P plug
Turn Table (30 cm)	100 to 240 VAC	50/60 Hz	2A	NEMA 5-16P plug

PHYSICAL SPECIFICATIONS				
	Length	Width	Height	Weight (nominal)
Test Volume	0.35 m	0.35 m	0.5 m	Turntable Load < 5 kgs
Outside Dimensions	120 cm	127 cm	195 cm	450 kgs
EUT Chamber Dimensions	120 cm	127 cm	108 cm	280 kgs
AP Shield Box Dimension	60 cm	60 cm	35 cm	45 kgs x 2
Turn Table (30 cm)	30 cm	30 cm	20 cm	10 kgs

TECHNICAL SPECIFICATIONS				
Model	WiFi dual antenna frequency range	Path length	Positioners	Shield performance
WTT-127A	2400 MHz to 2500MHz 5000MHzto 6000MHz	80 cm	DUT Turntable x 1 0-360 °	> 100 dB 400 MHz to 18 GHz Signal Filter isolation > 65db

WTT-127A AUTOMATED SYSTEM EQUIPMENT LIST:

System equipment list	Specification / Description	Q'ty
EUT Chamber	Dimension: 127 X 120X108 cm	1
AP Shield Box (Set)	Dimension: 60 x 60 x 35 cm	2
System integration stand	System rack	1
ETF-198	Programmable RF attenuators with OTA & conduction port	1
WiFi dual Band Antenna	High gain dual band antenna / Ultra small size	4
System Host PC	INTEL i7 with MS Windows 7	1
Turn Table	30cm EUT Turn Table	1
RF Cable	SMA up to 18GHz System connection	20
RS-232 Cable	Turn Table Control	2
LAN Cable (Cat-7)	System Data communication	2
Signal interface (I/O) filter & Connector	AC filter (Rate 9A-Max) X2, RJ-45 x3 , RS-232 x1, Fan & Air flow x2, SMA Connector x 16 (Total package)	1
IxChariot S/W	IxChariot throughput measurement Software (Customer Supplied)	0 (1)
Client AP (2.5GHz , 5GHz)	Any brand and model (Customer Supplied)	0 (2)
System Control software	Licensed version 12 months free upgrade. *Maintenance required after 12 months.*	1

WTT-127A AUTOMATED SYSTEM INTERFACE (I/O) LIST:

Signal Filter / Interface					
	AC Power filter (100-240V)	RJ-45 Filter (10/100/1000)	RS-232 Filter	Fan & Honey Comb	SMA Connector
EUT Chamber	1	2	1	1	8
AP Shield Box (set/each)	1	1	0	1	4