PT50 Small-size Reverberation Chamber

Production Testing of cellular and wireless technologies

690 MHz to 6 GHz

Main Features

- Production Testing (non-signalling)
- 1600 mm (H) x 600 mm (W) x 950 mm (L)
- Largest DUT dimension: 15 cm
- Maximum DUT weight: 5 kg
- Up to 8 DUTs simultaneous testing
- WLAN 802.11, GSM, WCDMA, LTE
- Communication to/from DUT via Bluetooth
- Pneumatic door-drawer available (optional)
- Automated DUT line control through barcode reader
- Automated Test Cell control
- Fully automated tests with R&S, NI and Anritsu instruments
- Simple Production-Engineer Test Mode
- Portable System with reduced size and wheels
- RPI available for remote control
- Customized test script design available
- Mains power: 100-240 VAC 50-60 Hz
- Data interface: USB
- RF isolation (shielding): ~ 80 dB

Measurement system

The PT50 small-size Reverberation Chamber Series is the fastest OTA test chamber in the market. With smart-stirring and capable of simultaneously testing up to 8 DUTs of up to 15cm and 5kg, the PT50 is intended for Production OTA Testing in non-signalling mode, providing unheard-of extremely-fast test times with good accuracy and repeatability and the smallest footprint on the market.

PT50_1072016-11-11-2017__111218.txt

```
Chipset Profile: XXXX
DUT ID: 84:DB:AC:25:74:76
DUT IMEI: XXXX
Elapsed Time (s): 317
Test File: C:\Users\EMITE\Desktop\PT50v1.3(Release-Dev)\tests\Line1@84DBAC257476-11-11-2017__111218.txt

No. TestItem                                Result      Min         Max         Result
-----------------------------------
1   LTE Band1 Ch=300 Pri Rx Rssi            -65.96      -67.39      -63.39      Pass
2   LTE Band1 Ch=300 Div Rx Rssi            -71.15      -73.10      -69.10      Pass
3   Modem1 GSM GSM900 Ch=38 Tx Pow          28.12       27.13       31.13       Pass
4   GSM GSM900 Ch=38 Tx Pow                 29.26       27.13       31.13       Pass
5   WCDMA Band8 Ch=2788 Tx Pow              19.76       17.72       21.72       Pass
6   LTE Band3 Ch=1575 Pri Rx Rssi           -66.89      -68.68      -64.68      Pass
7   LTE Band41 Ch=40620 Pri Rx Rssi         -64.07      -66.43      -62.43      Pass
8   LTE Band41 Ch=40620 Div Rx Rssi         -75.44      -77.66      -73.66      Pass
9   GSM GSM1800 Ch=699 Tx Pow               27.41       25.29       29.29       Pass
10  Modem1 GSM GSM1800 Ch=699 Tx Pow        27.99       25.29       29.29       Pass
11  LTE Band1 Ch=18300 Tx Pow               22.22       20.33       24.33       Pass
-----------------------------------


-------------------------------------------------------------------------------
LINE PRODUCTION No.2
-------------------------------------------------------------------------------
Tester: 6EB04C27EB46AA4D(1)
Chipset Profile: XXXX
DUT ID: F4:9F:F3:AA:9E:19
DUT IMEI: XXX
Elapsed Time (s): 316
Test File: C:\Users\EMITE\Desktop\PT50v1.3(Release-Dev)\tests\Line2@F49FF3AA9E19-11-11-2017__111218.txt

No. TestItem                                Result      Min         Max         Result
-----------------------------------
1   Modem1 GSM GSM900 Ch=38 Tx Pow          29.04       27.13       31.13       Pass
2   GSM GSM900 Ch=38 Tx Pow                 29.39       27.13       31.13       Pass
3   WCDMA Band8 Ch=2788 Tx Pow              19.15       17.72       21.72       Pass
4   GSM GSM1800 Ch=699 Tx Pow               27.11       25.29       29.29       Pass
5   LTE Band1 Ch=300 Pri Rx Rssi            -65.55      -67.39      -63.39      Pass
```

TxPower, RSSI and other non-signalling SISO OTA figures of merit for all cellular and wireless technologies, including Main/Diversity/All antenna switching.

www.emite-ing.com

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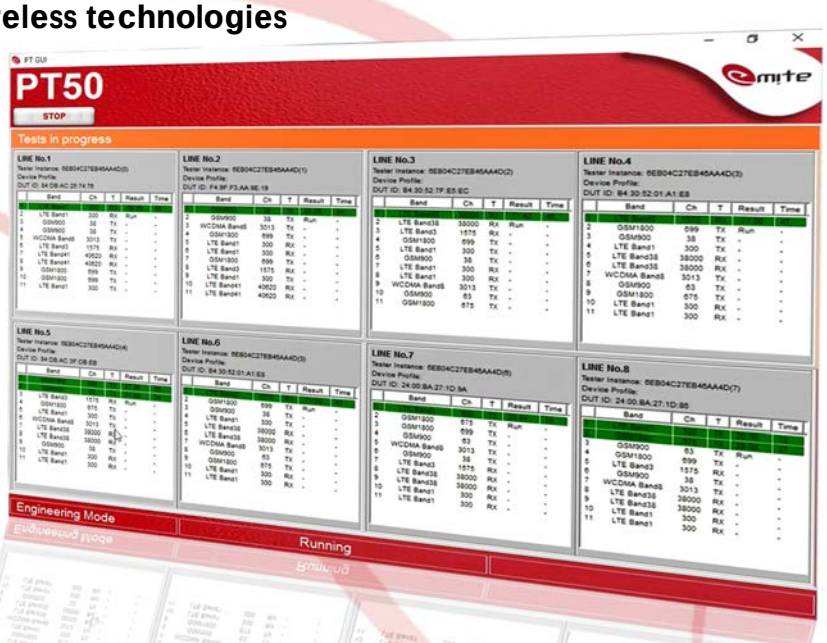


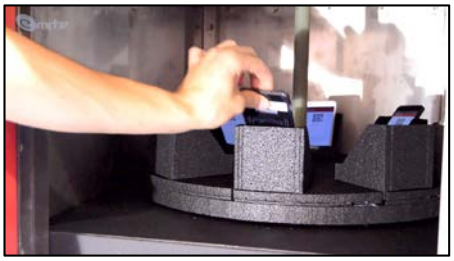
With unprecedented parallel OTA testing (up to 8 DUTs simultaneously) including batch and user-defined API list of tests with pass/fail criteria set and evaluation, PT50 is perfect for Production Testing in limited spaces.

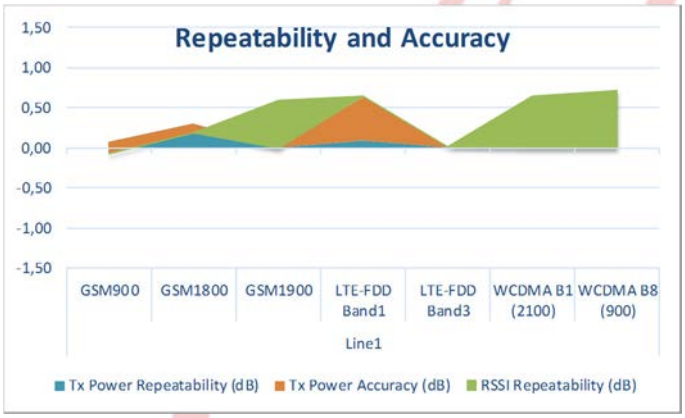
With user-selectable technology, band, channel, bandwidth, antennas, and other parameters in an individual manner for each test, a batch of tests can be run overnight in an unsupervised manner, something that only the Test Systems from EMITE can do. The PT50 makes use of a 8-DUT carrousel on an internal turn table for extremely-fast testing of devices, providing an unheard-of and unique test capability for production lines in limited spaces. Profiles definition by user for proprietary chipset confidential AT commands is optional.

Typical non-signalling complete batch testing times for 8 DUTs are around 300s. Typical 1 dB STD accuracy and repeatability (1.5 dB for 690 to 860 MHz). With up to 8 DUTs parallel testing capabilities, automated detection and usage of any eNodeB capability and overnight unsupervised measurements, PT50 holds unmatchable capabilities and test times for Production Testing.

Key Features

- Pre-calibrated from manufacturing plant
- EMITE app for automated non-signalling testing
- Control of up to 8 DUTs tested in parallel through carrousel in turn table





The EMITE GUI software and UE app monitors the wireless connection to the DUTs and the test schedule to ensure parallel testing is run smoothly.

The EMITE barcode reader, UE App, Bluetooth control and touchscreen embedded PC uniquely identifies DUTs, test lines and chambers in a room with a set of many chambers.

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