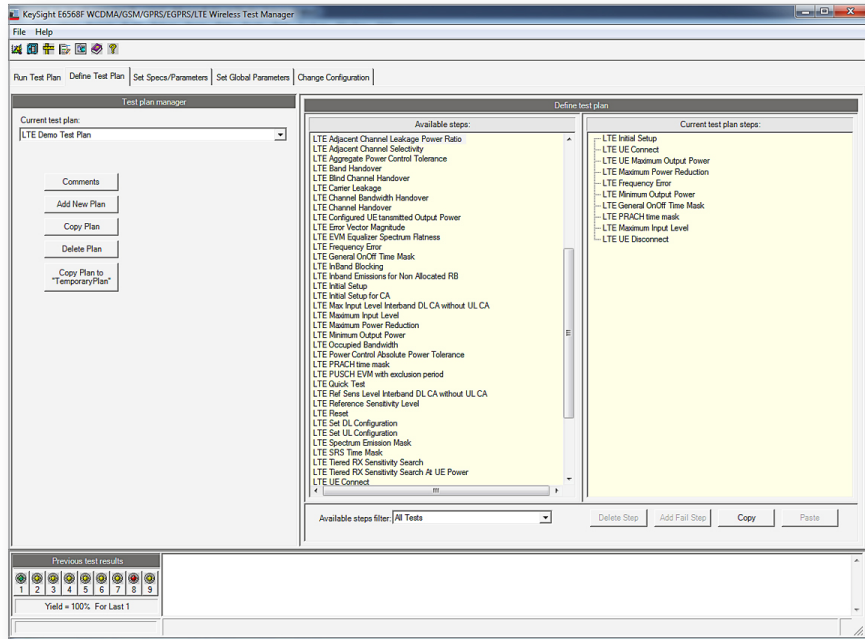


# Keysight E6568F UMTS/LTE/LTE-A Wireless Test Manager

## Technical Overview



Powerful, easy-to-use test automation software that helps you accelerate the design and manufacturing and quickly achieve volume production of multi-format W-CDMA/GSM/GPRS/EGPRS and LTE FDD/TDD wireless devices

## Tests Supported

### LTE/LTE-A transmitter tests

- Minimum output power
- Maximum output power
- Aggregate power control tolerance
- EVM equalizer spectrum flatness
- Occupied bandwidth
- Additional maximum power reduction
- Configured UE transmitted output power
- Spectrum emission mask
- Additional spectrum emission mask
- PRACH time mask
- SRS time mask
- Power control absolute power tolerance
- PUSCH-EVM with exclusion period
- In-band emissions for non-allocated RB
- Maximum power reduction
- Frequency error
- Error vector magnitude
- Carrier leakage
- Adjacent channel leakage power ratio
- General ON/OFF time mask

### LTE/LTE-A receiver tests

- Reference sensitivity level
- Maximum input level
- Adjacent channel selectivity (ACS)
- In-band blocking
- Reference sensitivity level for CA
- Maximum input level for CA
- LTE tiered Rx sensitivity search
- LTE tiered Rx sensitivity search at UE

### W-CDMA/HSPA/HSPA+/DC-HSDPA call processing

- Base station (BS) originate/release call
- Mobile registration
- Mobile originate (AMR mode)
- Change channel
- W-CDMA to GSM handoff
- Short message service (SMS)

### W-CDMA/HSPA/HSPA+/DC-HSDPA transmitter tests

- Adjacent channel leakage power ratio (ACLR)
- Inner loop power control
- Maximum output power
- Minimum output power

- Occupied bandwidth (OBW)
- Open loop power control
- Phase discontinuity
- Spectrum emission mask (SEM)
- Transmit on/off power
- Waveform quality
- HSDPCCH test
- Base station emulation control

### W-CDMA/HSPA/HSPA+/DC-HSDPA receiver tests

- Maximum input level (BER)
- Reference sensitivity level (BER)
- BLER

### GSM/GPRS/EGPRS call processing

- GSM MS and BS origination
- GSM MS and BS release
- GPRS mobile-initiated attach and detach
- GPRS and EGPRS packet data transfers on uplink and downlink
- Channel, band, and format changes with continuous attach/camp
- Short message service (SMS)

### GSM/GPRS/EGPRS transmitter tests

- GSM/GPRS/EGPRS Tx power
- EGPRS modulation accuracy
- GSM/GPRS/EGPRS phase and frequency error
- Power versus level
- GSM/GPRS/EGPRS burst timing error
- GSM/GPRS/EGPRS output RF spectrum
- GSM/GPRS/EGPRS power versus time

### GSM/GPRS/EGPRS receiver tests

- GSM fast BER
- GSM BER
- GSM/GPRS BER
- GPRS/EGPRS BLER
- EGPRS SRB bit error
- Rx level and quality report

### General tests

- Current drain
- GSM voice quality
- Data analyzer
- Keysight 14565B device characterization software control
- GPIB command send/receive
- DUT command send/receive
- LAN command send/receive

## Hardware Supported

### Test instruments

- E7515A UXM wireless communications test set
- E7530A LTE test application or E7630A LTE lab application
- E5515E mainframe (or equivalent E5515C/B/T with Options 002 and 003)
- E1987A fast switching mobile test application (revision A.14.14 or later)
- E1963A W-CDMA mobile test application (revision A.19.14 or later)
- E6703H W-CDMA lab application (revision H.01.14 or later)
- E6785H fast switching lab application (revision H.01.15 or later)
- E6703H W-CDMA lab application (revision H.01.14 or later)
- E6785H fast switching lab application (revision H.01.15 or later)
- E1968A GSM/GPRS/EGPRS mobile test application (revision A.07.21 or later)
- Keysight 66311B, 66319B, and 66321B power supplies
- Keysight 34970 with 34901A, 34903A, and 34907A data acquisition/switch unit

### Fixtures

- Tescom TC-5941, TC-5942, and TC-5952B

### Adapters

- Keysight 82357A USB/GPIB interface
- National Instruments GPIB-USB to GPIB

### PC Cards

- Keysight GPIB
- National Instruments GPIB
- Advantech PCI 1750 digital I/O
- Control RocketPort 95870-3 and 99096-3 multi-port serial

### Peripherals

- Symbol LS-1220-1200A fixed bar code reader
- Symbol LS-3603MX-1200A, P300FZY, and LS4004I-1100 handheld bar code reader
- HP printers
- Epson TM-U200D and TM-U220D strip printer

## PC requirements

- Operating system: Microsoft
- Windows 7 Professional and Enterprise
- Microsoft Visual Studio.NET (for development)
- Microsoft Internet Explorer version 6.0 or later
- 600 MHz Pentium III or higher
- 512 MB RAM minimum (1024 MB is recommended for normal development)
- 200 MB free hard drive space
- CD-ROM
- GPIB card or converter with VISA drivers (one per test system)
- Serial ports for fixtures, device control, and bar code reader

## Order Information

- E6568F UMTS/LTE/LTE-A Wireless Test Manager
  - E6568F-1TP development and run-time license
- E6568FU upgrade existing E6568x to E6568F
  - E6568FU-1TP development and run-time license
- E6569F Wireless Test Manager suite, including E6567F and E6568F
  - E6569F-1TP development and run-time license

## For More Information

E6568F Wireless Test Manager specifications and product literature are available at [www.keysight.com/find/e6568f](http://www.keysight.com/find/e6568f)

8960 Series 10 test set specifications, product literature, application notes, and configuration guide are available at [www.keysight.com/find/8960](http://www.keysight.com/find/8960)

E7515A UXM test set specifications, product literature, application notes and configuration guide are available at [www.keysight.com/find/E7515A](http://www.keysight.com/find/E7515A)



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