

Tune-up procedures

1.1 Test Equipment List

- GSM and WCDMA tester: CMU200
- Dummy battery or Power Supply: agilent E66319D
- PC with serial port
- GPIB card

1.2 VCTCXO frequency accuracy adjust procedure

Function:

To calibrate the VCTCXO frequency accuracy.

Procedure:

step1: The computer sets E1615 to the Factory test mode and works at GSM850 band, sets the CMU200 to GSM Analyzer mode.

Step2: E1615 was adjusted to transmit 33dBm by tuning the ADC. Use the CMU200 to measure the frequency error. Tuning the PDM parameter until the frequency error $\leq 5\text{Hz}$.

1.3 The WCDMA power adjust procedure

Function:

After the WCDMA transmit POWER calibration the E1615 can find the relationship between the TX-AGC and output power. So it can transmit the specific power according to the 3GPP protocol.

Procedure:

Step1: The computer sets E1615 to the Factory test mode and works at WCDMA band, sets the CMU200 to WCDMA Analyzer mode.

Step2: Tuning the TX-AGC of E1615 from 60 to 460 and measure the output power of the E1615 via CMU200, So we can find the relationship between the TX-AGC and output

power.

1.4 The PCS1900 power adjust procedure

Function:

After the PCS1900 transmit POWER calibration the E1615 can find the relationship between the TX-DAC and output power. So it can transmit the specific power according to the 3GPP protocol.

Procedure:

Step1: The computer sets E1615 to the Factory test mode and works at PCS1900 band, sets the CMU200 to PCS1900 Analyzer mode.

Step2: Tuning the TX-DAC of E1615 from 50 to 600 and measure the output power of the E1615 via CMU200, So we can find the relationship between the TX-DAC and output power.

1.5 The GSM850M power adjust procedure

Function:

After the GSM850M transmit POWER calibration the E1615 can find the relationship between the TX-DAC and output power. So it can transmit the specific power according to the 3GPP protocol.

Procedure:

Step1: The computer sets E1615 to the Factory test mode and works at GSM850M band, sets the CMU200 to GSM850M Analyzer mode.

Step2: Tuning the TX-DAC of E1615 from 50 to 600 and measure the output power of the E1615 via CMU200, So we can find the relationship between the TX-DAC and output power.

Note: The user has no possibility to change these settings later on.