

Tune-up procedures of U1307

1.1 Test Equipment List

- GSM tester: CMU200
- Dummy battery or Power Supply: Agilent 66319D
- 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 U1307 to the Factory test mode and works at US cellular band, sets the CMU200 to PCS1900/WCDMA850/GSM850 Analyzer mode.

Step2: U1307 was adjusted to transmit 30dBm/24dBm by tuning the ADC. Use the CMU200 to measure the frequency error. Tuning the PDM parameter until the frequency error $\leq 190\text{Hz}/85\text{Hz}$.

1.3 The PCS1900/WCDMA850/GSM850 power adjust procedure

Function:

After the PCS1900/WCDMA850/GSM850 transmit POWER calibration the U1307 can find the relationship between the TX-AGC and output power. So it can transmit the specific power according to the 3GPP2 protocol.

Procedure:

Step1: The computer sets U1307 to the Factory test mode and works at PCS1900/WCDMA850/GSM850 mode, sets the CMU200 to PCS1900/WCDMA850/GSM850 Analyzer mode.

Step2: Tuning the TX-AGC of U1307 from 50 to 600 and measure the output power of the U1307 via CMU200, so we can find the relationship between the TX-AGC and output power.

1.4 The Bluetooth RF test procedure

Step1: The computer sets U1307 to the Factory test mode and works at Bluetooth mode and sets the CMU200 to Bluetooth Analyzer mode.

Step2: U1307's Bluetooth chip connects with CMU200 through SMA interface, then all the BT RF performances can be tested.

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