

Tune up procedure

1. It must provide an operational voltage (3.6~4.2V DC) to turn on the module and on one certain channel in service mode by means of company proprietary software.
2. Base station simulator (Rohde& Schwarz CMU200 or Agilent 8960) measures the module specific RF characteristics.
3. The maximum gain of each individual phone are adjusted until the target value met.

For GSM 850 band :	PCL = 5, PWR = 32 ± 1.5 dBm
For GPRS 850:	Class 8 , PCL=3, PWR= 32 ± 1.5 dBm
	Class 10, PCL=3, PWR= 29 ± 1.5 dBm
	Class 12, PCL=3, PWR= 26 ± 1.5 dBm
For EDGE 850	Class 8, PCL=3, PWR= 26 ± 2 dBm
	Class 10, PCL=3, PWR= 24 ± 2 dBm
	Class 12, PCL=3, PWR= 22 ± 2 dBm
For GSM 900 band :	PCL = 5, PWR = 32 ± 1.5 dBm
For GPRS 900:	Class 8 , PCL=3, PWR= 32 ± 1.5 dBm
	Class 10, PCL=3, PWR= 29 ± 1.5 dBm
	Class 12, PCL=3, PWR= 26 ± 1.5 dBm
For EDGE 900	Class 8, PCL=3, PWR= 26 ± 2 dBm
	Class 10, PCL=3, PWR= 24 ± 2 dBm
	Class 12, PCL=3, PWR= 22 ± 2 dBm
For GSM 1800 band :	PCL = 0, PWR = 29 ± 1.5 dBm
For GPRS 1800:	Class 8, PCL=3, PWR= 29 ± 1.5 dBm
	Class 10, PCL=3, PWR= 27 ± 1.5 dBm
	Class 12, PCL=3, PWR= 24 ± 1.5 dBm
For EDGE 1800	Class 8, PCL=3, PWR= 27 ± 1.5 dBm
	Class 10, PCL=3, PWR= 24 ± 1.5 dBm
	Class 12, PCL=3, PWR= 23 ± 1.5 dBm
For PCS 1900 band :	PCL = 0, PWR = 29 ± 1.5 dBm
For GPRS 1900:	Class 8, PCL=3, PWR= 29 ± 1.5 dBm
	Class 10, PCL=3, PWR= 27 ± 1.5 dBm
	Class 12, PCL=3, PWR= 24 ± 1.5 dBm
For EDGE 1900	Class 8, PCL=3, PWR= 27 ± 1.5 dBm
	Class 10, PCL=3, PWR= 24 ± 1.5 dBm
	Class 12, PCL=3, PWR= 23 ± 1.5 dBm
For WCDMA FDD BAND I :	MAXIMUM PWR = $24 \pm 1/-3.5$ dBm
For WCDMA FDD BAND V:	MAXIMUM PWR = $24 \pm 1/-3.5$ dBm

Then this appropriate gain settings are stored in each module individually. The user has no possibility to change these settings later on, and during manufacturing each phone will be individual calibrated. The measurement is done in fully calibrated setup, which is based on a Rohde& Schwarz CMU200 or Agilent 8960 base station simulator. Furthermore, the highest power level is verified afterwards in a call measurement on three channels (low, middle and high).