Tune Up Procedure

Tune-up procedure

During manufacturing each device is individually calibrated. Measurement is performed in a fully calibrated setup using an Anritsu 8820C base station simulator (system tester). Measurement procedure is outlined below:

Measurement Procedure:

1. Set the device to operational voltage and on a predefined channel in a special test mode.
2. The actual output power is measured at several power levels.
3. The gain factors of each individual device are adjusted until the target value is met. The appropriate gain control settings for each output power level are stored in each device individually (for each power level).
4. The maximum gains of each individual device are adjusted and measured until the target value is met. The production target power with tolerance compiles with the maximum power in test report.

Then these appropriate gain settings are stored in each device individually. The user has no possibility to change these settings later on, and during manufacturing each device will be individual calibrated in this range. The measurement is done in a fully calibrated setup, which is based on the base station simulator. Furthermore, the highest power level is verified afterwards in a call measurement on each channel.

Please find below target values of the maximum level of the production unit:

Maximum power of WLAN / BT

TX Power Setting

- Each product is programmed with the pre-defined RF parameters
- Each product RF power level is measured to ensure the power level not exceeding the target power level, in a fully calibrated setup.
- The user has no possibility to change these settings later on

Please find below the **Maximum** Transmit Power for production units:

WLAN

	Mode	Channel	Frequency (MHz)	Tune-Up Limit
2.4GHz WLAN ANT 1+2	802.11b	CH 1	2412	22
		CH 6	2437	22
		CH 11	2462	22
	802.11g	CH 1	2412	20
		CH 6	2437	23
		CH 11	2462	20
	802.11n-HT20	CH 1	2412	19
		CH 6	2437	21
		CH 11	2462	19
	802.11n-HT40	CH 3	2422	16
		CH 6	2437	20
		CH 9	2452	16