

# 1. SPECIFICATION

## 1. GENERAL

Frequency Range	CDMA Mode	Analog Mode
Transmitter	824.64 ~ 848.37	824 ~ 849
Receiver	869.64 ~ 893.37	869 ~ 894
Channel Spacing	1.23	30
Number of Channels	20 FA	832 CHs
Duplex Spacing	45	
Frequency Stability	300Hz	2.5ppm
Operating Temperature	-20~ +50 (-4 ~ +122 )	
Operating Voltage HHP	3.6V DC (10%)	
Size and Weight  Including <b>slim</b> battery Including standard battery Including extended-life battery	105 x 45 x 18(slim) , 105 x 45 x 21(standard) 105 x 45 x 24(extended) 89g 120g 138g	
Operating Time		Analog Mode
Standby Time	<b>30 ~ 80</b> hours (with standard battery) <b>50 ~ 130</b> hours (with extended-life battery)	6 ~ 7 hours (with standard battery) 15 ~ 17 hours (with extended-life battery)
Talk Time	150 min (with standard battery) 240 min (with extended-life battery)	about 55 min (with standard battery) about 160 min (with extended-life battery)

## 2. FM MODE

### TRANSMITTER

RF output power	0.36W
Carrier ON/OFF condition "ON" Condition "OFF" Condition	within 3dB of specification output (in 2ms) below -60dBm (2ms)
Compressor Compression Rate Attack Time Recovery Time Reference Input	2:1 3 13.5 Input level for producing a nominal 2.9peak frequency deviation of transmitted carrier
Preamphasis	6dB/OCT within 0.3 ~ 3
Maximum Frequency Deviation F3 of G3 Supervisory Audio Tone Signaling Tone Wideband Data	12 2 8 8
Post Deviation limiter Filter 3.0 ~ 5.9 5.9 ~ 6.1 6.1 ~ 15 Over 15	above $40\text{Log}(F/3000)\text{dB}$ above 35dB above $40\text{Log}(F/3000)\text{dB}$ above 28dB
Spectrum Noise Surpreion  For all modulation $f_0 + 20 \sim f_0 + 45$  For modulation by voice and SAT $f_0 + 45$  For modulation by WBD (without SAT) and ST (with SAT) $f_0 + 45 \sim f_0 + 60$ $f_0 + 60 \sim f_0 + 90$ $f_0 + 90 \sim 2f_0$	above 26dB  above $63 + 10\text{Log}(PY)$ dB  above 45dB above 65dB above $63 + 10\text{Log}(PY)\text{dB}$ (where $f_0$ = carrier frequency PY = mean output power in watts)
Harmonic and conduct Spurious Emission	below $43 + 10\text{Log}(PY)\text{dB}$

## **RECEIVER**

De-Emphasis	-6dB/OCT within 0.3 3
Expander Expander Rate Attack Time Recovery Time Reference Input	1 : 2 within 3 within 13.5 output level to a 1000tone from a carrier within 2.9 peak frequency deviation
Sensitivity	12dB SINAD/-116dBm
Intermodulation Spurious Response Attenuation	above 65dB
RSSI Range	above 60dB
Protection Against Spurious Response Interface	above 60dB
In Band Conducted Spurious Emission Transmit Band Receive Band	below -60dBm below -80dBm
Out of Band Conducted Spurious Emission	below -47dBm
Radiated Spurious Emission	
Frequency Range 25 ~ 70 70 ~ 130 130 ~ 174 174 ~ 260 260 ~ 470 470 ~ 1	Maximum Allowable EIRP -45dBm -41dBm -41 ~ -32dBm -32dBm -32 ~ -26dBm -21dBm

### 3. CDMA MODE

Waveform Quality	above 0.944
Time Reference	within 1
Rx Sensitivity and Dynamic Range	-104dBm , FER=within 0.5% -104dBm ~ -25dBm, FER=within 0.5%
Tx Output Power	Maximum <b>320mW (25dBm)</b>
Tx Frequency Deviation	within 300
Occupied Band Width	1.32
Tx Conducted Spurious Emission	900: below -42dBc / 30 1.98: below -54dBc / 30
Minimum Tx Power Control	below -50dBm
Open Loop Power Control	-25dBm : -57.0dBm ~ -38.5dBm -65dBm : -17.5dBm ~ + 1.5dBm -104dBm : +18.0dBm ~ +30.0dBm
Standby Output Power	below -61dBm
Closed Loop Tx Power Control Range	Test1 : above 24dB Test2 : 0~ 2.5 Test3 : above 24dB Test4 : above 24dB Test5 : above 24dB

## 2. FREQUENCY RANGE

Transmitter Frequency			Receiver Frequency		
FA NO.	CH NO.	Center Frequency	FA NO.	CH NO.	Center Frequency
1	1011	824.64	1	1011	869.64
2	29	825.87	2	29	870.87
3	70	827.10	3	70	872.10
4	111	828.33	4	111	873.33
5	152	829.56	5	152	874.56
6	193	830.79	6	193	875.79
7	234	832.02	7	234	877.02
8	275	833.25	8	275	878.25
9	316	834.48	9	316	879.58
10	363	835.89	10	363	880.89
11	404	837.12	11	404	882.12
12	445	838.35	12	445	883.35
13	486	839.58	13	486	884.58
14	527	840.81	14	527	885.81
15	568	842.04	15	568	887.04
16	609	843.27	16	609	888.27
17	650	844.27	17	650	889.27
18	697	845.91	18	697	890.91
19	738	847.14	19	738	892.14
20	779	848.37	20	779	893.37