

1. SPECIFICATION

1. GENERAL

Frequency Range	CDMA MODE	ANALOG MODE
Transmitter	824.64 ~ 848.37 MHz	824 ~ 849 MHz
Receiver	869.64 ~ 893.37 MHz	869 ~ 894 MHz
Channel Spacing	1.23 MHz	30 KHz
Number of Channels	20 FA	832 CHs
Duplex Spacing	45 MHz	
Frequency Stability	$\pm 300\text{Hz}$	$\pm 2.5\text{ppm}$
Operating Temperature	$-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$ ($-4^{\circ}\text{F} \sim +122^{\circ}\text{F}$)	
Operating Voltage HHP	3.6V DC ($\pm 10\%$)	
Size and Weight	80 x 42 x 22mm (slim) , 80 x 42 x 24mm (standard)	
Including slim battery	93g	
Including standard battery	116g	
Operating Time	CDMA MODE	ANALOG MODE
Standby Time	40 ~ 100hours (with slim battery) 70 ~ 170 hours (with standard battery)	4 ~ 5 hours (with slim battery) 8 ~ 9 hours (with standard battery)
Talk Time	150 min (with slim battery) 250 min (with standard battery)	about 45 min (with slim battery) about 100 min (with standard battery)

RECEIVER

De-Emphasis	-6dB/OCT within 0.3 3KHZ
Expandor	1 : 2
Expandor Rate	within 3ms
Attack Time	within 13.5ms
Recovery Time	output level to a 1000Hz tone from a carrier within $\pm \frac{3}{4}$ 2.9KHz
Reference Input	peak frequency deviation
sensitivity	12dB SINAD/-116dBm
Intermodulation Spurious Response Attenuation	above 65 dB
RSSI Range	above 60 dB
Protection Against Spurious Response Interface	above 60 dB
In Band Conducted Spurious Emission	
Transmit Band	below -60dBm
Receive Band	below -80dBm
Out of Band Conducted Spurious Emission	below -47dBm
Radiated Spurious Emission	
Frequency Range	Maximum Allowable EIRP
25 ~ 70 MHz	-45dBm
70 ~ 130 MHz	-41dBm
130 ~ 174 MHz	-41 ~ -32dBm
174 ~ 260 MHz	-32dBm
260 ~ 470 MHz	-32 ~ -26dBm
470 ~ 1 GHz	-21dBm

2. FM MODE

TRANSMITTER

RF output power	0.6W (+2/-4dB)
Carrier ON/OFF condition "ON" Condition "OFF" Condition	within ± 3 dB of specification output(in 2ms) below -60dBm (2ms)
Compressor Compression Rate Attack Time Recovery Time Reference Input	2 : 1 3ms 13.5ms Input level for producing a nominal ± 2.9 KHz peak frequency deviation of transmitted carrier
Preamphasis	6dB/OCT within 0.3 ~ 3KHz
Maximum Frequency Deviation R3 of G3 Supervisory Audio Tone Signaling Tone Wideband Data	± 12 KHz ± 2 KHz ± 8 KHz ± 8 KHz
Post Deviation limiter Filter 3.0 ~ 5.9KHz 5.9 ~ 6.1KHz 6.1 ~ 15KHz Over 15KHz	above $40\log(F/3000)$ dB above 35dB above $40\log(F/3000)$ dB above 28dB
Spectrum Noise Surpreion For all modulation $f_o + 20\text{KHz} \sim f_o + 45\text{KHz}$ For modulation by voice and SAT $f_o + 45\text{KHz}$ For modulation by WBD (without SAT) and ST(with SAT) $f_o + 45\text{KHz} \sim f_o + 60\text{KHz}$ $f_o + 60\text{KHz} \sim f_o + 90\text{KHz}$ $f_o + 90\text{KHz} \sim 2f_o$	above 26dB above $63 + 10\log(PY)$ dB above 45dB above 65dB above $63 + 10\log(PY)$ dB (where f_o = carrier frequency PY = mean output power in watts)
Harmonic and conduct Spurious Emission	below $43 + 10\log(PY)$ dB

CDMA MODE

Waveform Quality	above 0.944
Time Reference	within $\pm 1\mu\text{s}$
Rx Sensitivity and Dynamic Range	-104dBm , FER=within 0.5% -104dBm ~ -25dBm, FER=within 0.5%
Tx Output Power	Maximum 320mW (25dBm)
Tx Frequency Deviation	within $\pm 300\text{Hz}$
Occupied Band Width	1.32MHz
Tx Conducted Spurious Emission	900KHz : below -42dBc / 30KHz 1.98MHz: below -54dBc / 30KHz
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 $\pm 24\text{dB}$ Test2 : 0ms ~ 2.5ms Test3 : above $\pm 24\text{dB}$ Test4 : above $\pm 24\text{dB}$ Test5 : above $\pm 24\text{dB}$

2. FREQUENCY RANGE

Transmitter Frequency		
FA NO.	CH NO.	Center Frequency
1	1011	824.64MHz
2	29	825.87MHz
3	70	827.10MHz
4	111	828.33MHz
5	152	829.56MHz
6	193	830.79MHz
7	234	832.02MHz
8	275	833.25MHz
9	316	834.48MHz
10	363	835.89MHz
11	404	837.12MHz
12	445	838.35MHz
13	486	839.58MHz
14	527	840.81MHz
15	568	842.04MHz
16	609	843.27MHz
17	650	844.27MHz
18	697	845.91MHz
19	738	847.14MHz
20	779	848.37MHz

Receiver Frequency		
FA NO.	CH NO.	Center Frequency
1	1011	869.64MHz
2	29	870.87MHz
3	70	872.10MHz
4	111	873.33MHz
5	152	874.56MHz
6	193	875.79MHz
7	234	877.02MHz
8	275	878.25MHz
9	316	879.58MHz
10	363	880.89MHz
11	404	882.12MHz
12	445	883.35MHz
13	486	884.58MHz
14	527	885.81MHz
15	568	887.04MHz
16	609	888.27MHz
17	650	889.27MHz
18	697	890.91MHz
19	738	892.14MHz
20	779	893.37MHz