

1. SPECIFICATION

1. GENERAL

Frequency Range Transmitter Receiver	Digital Mode 824 ~ 849 MHz 869 ~ 894 MHz	Analog Mode 824 ~ 849 MHz 869 ~ 894 MHz
Channel Spacing	1.23 MHz	30KHz
Number of Channels	20 FA	832 CHs
Duplex Spacing	45 MHz	
Frequency Stability	± 2.5 ppm (-20 μ É ~ +60 μ É, -4 μ ~ +140 μ)	
Operating Temperature	-20 μ É ~ +60 μ É (-4 μ ~ +140 μ)	
Operating Voltage HHP Hands-Free	3.6V DC ($\pm 10\%$) 13.7V DC ($\pm 10\%$)	
Size and Weight Including standard battery Including extended battery Including long life battery	114.0 x 50.0 x 24.0 / 28.0 / 36.5 mm 145g 161g 189g	
Operating Time	Digital Mode	Analog Mode
Standby Time	up to 40 hours (with standard battery) up to 60 hours (with extended battery) up to 74 hours (with long life battery)	up to 5 hours (with standard battery) up to 8 hours (with extended battery) up to 12 hours (with long life battery)
Talk Time	up to 150 minutes (with standard battery) up to 240 minutes (with extended battery) up to 400 minutes (with long life battery)	up to 60 minutes (with standard battery) up to 105 minutes (with extended battery) up to 165 minutes (with long life battery)

2. ANALOG MODE

TRANSMITTER

RF output power	0.6W (+2/-4dB)
Carrier ON/OFF conditions "ON" Condition "OFF" Condition	within ± 3 dB of specification output (in 2mS) below -60dBm (in 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 F3 of G3 Supervisory Audio Tone Signaling Tone Wideband Data	± 12 KHz ± 2 KHz ($\pm 10\%$) ± 8 KHz ($\pm 10\%$) ± 8 KHz ($\pm 10\%$)
Post Deviation Limiter Filter 3.0 ~ 5.9KHz 5.9 ~ 6.1KHz 6.1 ~ 15KHz Over 15KHz	above 40 LOG (F/3000) dB above 35 dB above 40 LOG (F/3000) dB above 28 dB
Spectrum Noise Suppression For all modulation $f_0 + 20$ KHz ~ $f_0 + 45$ KHz For modulation by voice and SAT $f_0 + 45$ KHz For modulation by WBD(without SAT) and ST (with SAT) $f_0 + 45$ KHz ~ $f_0 + 60$ KHz $f_0 + 60$ KHz ~ $f_0 + 90$ KHz $f_0 + 90$ KHz ~ $2f_0$	above 26 dB above 63 +10 LOG (PY) dB above 45 dB above 65 dB above 63 +10 LOG (PY) dB (where f_0 =carrier frequency PY=mean output power in watts)
Harmonic and conducted Spurious Emissions	below 43 + 10 LOG (PY) dB

RECEIVER

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

3. DIGITAL MODE

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

4. FREQUENCY RAGNE

Receiver Frequency			Transmitter Frequency		
FA NO.	CH NO.	Center Frequency	FA NO.	CH NO.	Center Frequency
1	1011	869.64MHz	1	1011	824.64MHz
2	29	87.087MHz	2	29	825.87MHz
3	70	872.10MHz	3	70	827.10MHz
4	111	873.33MHz	4	111	828.33MHz
5	152	874.56MHz	5	152	829.56MHz
6	193	875.79MHz	6	193	830.79MHz
7	234	877.02MHz	7	234	832.02MHz
8	275	878.25MHz	8	275	833.25MHz
9	316	879.58MHz	9	316	834.48MHz
10	363	880.89MHz	10	363	835.89MHz
11	404	882.12MHz	11	404	837.12MHz
12	445	883.35MHz	12	445	838.35MHz
13	486	884.58MHz	13	486	839.58MHz
14	527	885.81MHz	14	527	840.81MHz
15	568	887.04MHz	15	568	842.04MHz
16	609	888.27MHz	16	609	843.27MHz
17	650	889.27MHz	17	650	844.27MHz
18	697	890.91MHz	18	697	845.91MHz
19	738	892.14MHz	19	738	847.14MHz
20	779	893.37MHz	20	779	848.37MHz