

Specifications

GENERAL	VHF	UHF			
Frequency:	136-162, 146-174 MHz	403-440, 438-470, 465-495 MHz			
Channel Capacity:	16, 32 or 64	16, 32 or 64			
Power Supply:	7.5 Volts +/- 20%	7.5 Volts +/- 20%			
FCC Description:	AB299F13039, AB299F13045	AB299F14057, AB299F14056, AB299F14058			
NO DISPLAY OR KEYPAD	1100 mAh NiCd	1300 mAh NiMH	1400 mAh NiMH	1600 mAh Slim Li-ion	1800 mAh Li-ion
Dimensions: (without knobs or belt clip)	130 x 62 x 45 mm	130 x 62 x 45 mm	130 x 62 x 43 mm	130 x 62 x 42 mm	130 x 62 x 45 mm
(H x W x D)	(5.12 x 2.4 x 1.75 inch)	(5.12 x 2.4 x 1.75 inch)	(5.12 x 2.4 x 1.69 inch)	(5.12 x 2.4 x 1.65 inch)	(5.12 x 2.4 x 1.75 inch)
Weight: (with radio, battery and belt clip, without antenna)	430 g (15.17 oz)	449 g (15.83 oz)	446 g (15.73 oz)	377 g (13.30 oz)	376 g (13.26 oz)
FULL DISPLAY AND LIMITED KEYPAD	130 x 62 x 45 mm	130 x 62 x 45 mm	130 x 62 x 43 mm	130 x 62 x 42 mm	130 x 62 x 45 mm
Dimensions: (without knobs or belt clip)					
(H x W x D)	(5.12 x 2.4 x 1.75 inch)	(5.12 x 2.4 x 1.75 inch)	(5.12 x 2.4 x 1.69 inch)	(5.12 x 2.4 x 1.65 inch)	(5.12 x 2.4 x 1.75 inch)
Weight: (with radio, battery and belt clip, without antenna)	451 g (15.91 oz)	469 g (16.54 oz)	467 g (16.47 oz)	397 g (14.0 oz)	396 g (13.97 oz)
FULL DISPLAY AND FULL KEYPAD	130 x 62 x 45 mm	130 x 62 x 45 mm	130 x 62 x 43 mm	130 x 62 x 42 mm	130 x 62 x 45 mm
Dimensions: (without knobs or belt clip)					
(H x W x D)	(5.12 x 2.4 x 1.75 inch)	(5.12 x 2.4 x 1.75 inch)	(5.12 x 2.4 x 1.69 inch)	(5.12 x 2.4 x 1.65 inch)	(5.12 x 2.4 x 1.75 inch)
Weight: (with radio, battery and belt clip, without antenna)	451 g (15.91 oz)	469 g (16.54 oz)	467 g (16.47 oz)	397 g (14.0 oz)	396 g (13.97 oz)
AVERAGE BATTERY LIFE	1100 mAh	1300 mAh	1400 mAh	1600 mAh	1800 mAh
Capacity (mAh):					
Hi-Power (5W) Talk Time:	8 hrs	9 hrs	10 hrs	12 hrs	14 hrs
Lo-Power (1W) Talk Time:	10 hrs	11 hrs	13 hrs	17 hrs	19 hrs

RECEIVER	VHF (12.5 kHz)	VHF (20/25 kHz)	UHF (12.5 kHz)	UHF (20/25 kHz)
Frequency:	146-174 MHz	146-174 MHz	403-440, 438-470, 465-495 MHz	403-440, 438-470, 465-495 MHz
Sensitivity: (12dB SINAD)	0.25 uV (typical)	0.25 uV (typical)	0.25 uV (typical)	0.25 uV (typical)
Adjacent Channel Selectivity:	-65dB	-70dB	-65dB	-70dB
Intermodulation:	-70dB	-70dB	-70dB	-70dB
Frequency Stability: (-30° C to +60° C)	0.00025%	0.00025%	0.00025%	0.00025%
Spurious Rejection:	-75dB	-75dB	-75dB	-75dB
Image and 1/2 I-F Rejection:	-70dB	-70dB	-70dB	-70dB
Audio Output @ < 5% Distortion:	500mW	500mW	500mW	500mW
TRANSMITTER	VHF	VHF	UHF	UHF
RF Output:	Low: 2W	High: 5W	Low: 1W	High: 4W
Frequency:	136-162, 146-174 MHz	136-162, 146-174 MHz	403-440, 438-470, 465-495 MHz	403-440, 438-470, 465-495 MHz
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30° C to +60° C)	0.00025%	0.00025%	0.00025%	0.00025%
Spurs/Harmonics:	-36dBm <1GHz, -30dBm >1GHz	-36dBm <1GHz, -30dBm >1GHz	-36dBm >1GHz, -30dBm >1GHz	-36dBm >1GHz, -30dBm >1GHz
Audio Response: (from 6dB/oct. Preemphasis, 300 to 3000 Hz)	+1, -3dB	+1, -3dB	+1, -3dB	+1, -3dB
Audio Distortion: @ 1000 Hz, 60% Rated	<3%	<3%	<3%	<3%
FM Noise:	-40dB (12.5 kHz), -45dB (25 kHz)	-40dB (12.5 kHz), -45dB (25 kHz)	-40dB (12.5 kHz), -45dB (25 kHz)	-40dB (12.5 kHz), -45dB (25 kHz)
FCC Modulation:	11K0F3E, 16K0F3E	11K0F3E, 16K0F3E	11K0F3E, 16K0F3E	11K0F3E, 16K0F3E

PORTABLE MILITARY STANDARDS 810 C, D, E & F

	MIL-STD 810C	MIL-STD 810D	MIL-STD 810E	MIL-STD 810F
	Method: Proc/Cat	Method: Proc/Cat	Method: Proc/Cat	Method: Proc/Cat
Low Pressure:	500.1: I	500.2: II	500.3: II	500.4: I
High Temp:	501.1: I, II	501.2: I, II	501.3: I, II	501.4: I, II
Low Temp:	502.1: I	502.2: I, II	502.3: I, II	501.4: I, II
Temp. Shock:	503.1: I	503.2: I	503.3: I	503.4: I
Solar Radiation:	505.1: I	505.2: I	505.3: I	505.4: I
Rain:	506.1: I, II	506.2: I, II	506.3: I, II	506.4: I
Humidity:	507.1: II	507.2: II, III	507.3: II, III	507.4: III
Salt Fog:	509.1: I	509.2: I	509.3: I	509.4: I
Blowing Dust:	510.1: I	510.2: I	510.3: I	510.4: I
Vibration:	514.2: VIII, X	514.3: I	514.4: I	514.5: I
Shock:	516.3: I, II, V	516.3: I, IV	516.4: I, IV	516.5: I

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	-30° C to +60° C
Storage Temperature:	-40° C to +85° C
ESD	IEC 601-2 KV
Water and Dust Intrusion:	IP54

Accelerated Life Test

Motorola's Accelerated Life Test (ALT) is a developmental process of rigorous laboratory testing that simulates years of field use. Motorola has a firm commitment to quality and reliability. These radios have been designed, manufactured and tested to achieve high levels of component and workmanship quality. Motorola radios are designed to minimize costly repairs and downtime.

*All specifications subject to change without notice.



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