

# Specifications

GENERAL	VHF	UHF
Frequency:	136-162 MHz (CM300 only), 146-174 MHz	438-470 MHz
Channel Capacity:	4 (CM200) 32 (CM300)	4 (CM200) 32 (CM300)
Low Power:	1-25W	1-25W
High Power:	25-45W	25-40W
Dimensions: H x W x L	1.73 x 6.67 x 4.64 inch (44 x 169 x 118 mm)	1.73 x 6.67 x 4.64 inch (44 x 169 x 118 mm)
Weight: (radio only)	2.25 lbs (1.02 Kg)	2.25 lbs (1.02 Kg)
FCC Description: 136-162 146-174	ABZ99FT3049 (45W) AZ492FT3805 (25W), ABZ99FT3046 (45W)	AZ492FT4856 (25W), ABZ99FT4048 (40W)

RECEIVER		
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30 C to +60 C)	+/-2.5 ppm	+/-2.5 ppm
Sensitivity: (12dB EIA SINAD)	0.35 uV (12.5 kHz), 0.3 uV (25 kHz) typical	0.35 uV (12.5 kHz), 0.3 uV (25 kHz) typical
Intermodulation:	65dB (12.5 kHz), 75dB (25 kHz)	60dB (12.5 kHz), 70dB (25 kHz)
Adjacent Channel Selectivity:	65dB (12.5 kHz), 75dB (25 kHz)	60dB (12.5 kHz), 70dB (25 kHz)
Spurious Rejection:	75dB	70dB
Rated Audio: (Extended audio with 4 ohm speaker)	4W internal, 13W external	4W internal, 13W external
Audio Distortion @ Rated Audio:	3% typical	3% typical
Hum and Noise:	-40dB (12.5 kHz), -45dB (25 kHz)	-35dB (12.5 kHz), -40dB (25 kHz)
Audio Response:	TIA603 & ETS300	TIA603 & ETS300
Conducted Spurious Emission:	-57dBm < 1 GHz, -47dBm > 1 GHz	-57dBm < 1 GHz, -47dBm > 1 GHz

TRANSMITTER		
Channel Spacing:	12.5/20/25 kHz	12.5/20/25 kHz
Frequency Stability: (-30 C to +60 C)	+/-2.5 ppm	+/-2.5 ppm
Modulation Limiting:	+/-2.5 kHz (12.5 kHz), +/-4 kHz (20 kHz), +/-5 kHz (25 kHz)	+/-2.5 kHz (12.5 kHz), +/-4 kHz (20 kHz), +/-5 kHz (25 kHz)
FM Hum and Noise:	-40dB (12.5kHz), -45dB (25 kHz)	-35dB (12.5 kHz), -40dB (25 kHz)
Conducted/Radiated Spurious Emission:1-25 W	-36dBm < 1 GHz -30dBm > 1 GHz	-36dBm < 1 GHz -30dBm > 1 GHz
25-45 W	-26dBm	-26dBm
Adjacent Channel Power:	-60dB (12.5 kHz), -70dB (25 kHz)	-60dB (12.5 kHz), -70dB (25 kHz)
Audio Response:	TIA603	TIA603
Audio Distortion:	3% typical	3% typical
FM Modulation:	11K0F3 (12.5 kHz), 16K0F3E (25 kHz)	11K0F3 (12.5 kHz), 16K0F3E (25 kHz)

ENVIRONMENTAL		
Operating Temperature:	-30° C to +60° C	-30° C to +60° C
Storage Temperature:	-40° C to +85° C	-40° C to +85° C
Thermal Shock:	-40° C to +80° C	-40° C to +80° C
Humidity:	95% RH @ 8 Hour	95% RH @ 8 Hour
Water and Dust Intrusion:	IP 54	IP 54
Packing Test:	Impact test	Impact test

## PORTABLE MILITARY STANDARDS 810 C, D, & E

	MIL-STD 810C	MIL-STD 810D	MIL-STD 810E
	Method: Proc/Cat	Method: Proc/Cat	Method: Proc/Cat
Temp. Shock:	503.1: I	503.2: I	503.3: I
Solar Radiation:	505.1: I	505.2: I	505.3: I
Rain:	506.1: II	506.2: II	506.3: II
Salt Fog:	509.1: I	509.2: I	509.3: I
Water & Dust:	510.1: I	510.2: I	510.3: I
Vibration:		514.3: I Cat.1	514.4: I Cat.1
Shock:	516.2: I, III	516.3: I, V	516.4: I, V

## 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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RD-EU-CM200\_CM300SINGLE