

# CP185™

## Commercial Portable Two-Way Radio



**Easy-to-handle, lightweight, compact design.**

Built-in simple voice scrambling for **increased privacy.**

VOX ready for **hands-free communication**—users can focus on the job at hand.

5 programmable buttons—enabling easy, **one-touch access to up to 10 user-selected features.**

**Multi-channel capability**—16 channels to support communication amongst all your employees.

Lilon battery provides **up to 11 hours (5/5/90 duty cycle) of battery life at high power** to meet the demands of your employee's work shift. A high-capacity battery option is available for those with longer shift requirements or increased communication needs.

**Rapid-rate drop-in charging**—charge radios in less than 3 hours with the included drop-in charger.

**High power**—5 watt (VHF) / 4 watt (UHF)—adjustable power levels help extend battery life.

Repeater capability when **increased coverage** is required.

**Talkaround capability** enabling communication even when a repeater is not being used.

Tighter specifications: -70 dB adjacent channel selectivity provides **enhanced rejection of interference** from strong signals on adjacent channels so you can get your message through clearly.

The CP185 portables offer a wide range of Motorola Original® audio, energy and carrying accessories as well as Mag One™ audio accessories, which provide **an affordable option** for light duty radio users.

### Enhanced functionality, reliable communication

Easy, discreet and prompt communication with your workforce is vital to improving response time, strengthening employee efficiency and increasing customer satisfaction. Motorola's two-way radios provide a durable, high-quality voice communication solution that helps your business increase productivity and provide excellent customer service.

Ideal for educational institutions, retail and hospitality businesses, service and manufacturing industries and other demanding applications, the Motorola CP185 brings you a robust two-way radio solution. With its extensive feature set, ergonomic shape for comfortable use plus voice privacy in a durable, lightweight, compact design, you can enhance communication while increasing efficiency and productivity.

# CP185™ Radio Specifications

## General Specifications

	CP185	
	VHF - 136-174 MHz	UHF - 435-480 MHz
Channel Capacity	16	
Channel Spacing	12.5 / 25 kHz switchable	
Model Numbers	AAH03KEF8AA7AN	AAH03RDF8AA7AN
FCC ID	AZ489FT3822	AZ489FT4883
IC ID	109U-89FT3822	109U-89FT4883
FCC Emissions Designators	11K0F3E	16K0F3E
Dimensions (H x W x L)	4.72 x 2.28 x 1.46 in. (120 x 58 x 37 mm)	
Weight (with Lilon)	12.34 ounces (350 g)	
Average Battery Life @ 5-5-90% Duty Cycle <sup>1</sup>		
Lilon battery	up to 11 hours	
NiMH battery	up to 10 hours	
High Capacity Lilon battery	up to 16 hours	

## Transmitter

	CP185	
	VHF	UHF
RF Output	2 to 5W	2 to 4W
Frequency Stability <sup>2</sup>	±2.5 ppm	
Spurs and Harmonics	-63dBc (-26dBm @ 5W; -27dBm @ 4W)	
FM Hum and Noise Ratio <sup>2</sup>	> 40 dB	
Modulation Limiting <sup>2</sup> (12.5/25 kHz)	≤2.5 kHz / ≤5 kHz	
Audio Response	+ 1 to -3 dB	
Audio Distortion <sup>2</sup>	< 5%	

## Receiver

	CP185	
	VHF	UHF
Sensitivity <sup>2</sup> (12 dB SINAD)	< -119 dBm (.25uV)	
Adjacent Channel Selectivity <sup>2</sup> (12.5/25 kHz)	-65 dB / -70 dB	
Intermodulation <sup>2</sup> (12.5/25 kHz)	>70 dB	
Spurious Rejection <sup>2</sup>	>70 dB	
Audio Distortion <sup>2</sup>	< 5%	
Hum and Noise Ratio <sup>2</sup> (12.5/25 kHz)	> 40 dB	
Conducted Emission	< -57 dBm	
Audio Output @ <5% Distortion	500 mW (at 24 ohm)	

## Military Standards

Applicable MIL-STD	810C		810D		810E		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	II
High Temperature	501.1	I, II	501.2	I/A1, II/A1	501.3	I/A1, II/A1	501.4	I/Hot, II/Hot
Low Temperature	502.1	I	502.2	I/C3, II/C1	502.3	I/C3, II/C1	502.4	I/C3, II/C1
Temperature Shock	503.1	-	503.2	I/A1C3	503.3	I/A1C3	503.4	I
Solar Radiation	505.1	II	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, III
Humidity	507.1	II	507.2	II	507.3	II	507.4	-
Salt Fog	509.1	-	509.2	-	509.3	-	509.4	-
Blowing Dust	510.1	I	510.2	I	510.3	I	510.4	I
Blowing Sand	-	-	510.2	II	510.3	II	510.4	II
Vibration	514.2	VIII/F, Curve-W	514.3	I/10, II/3	514.4	I/10, II/3	514.5	I/24
Shock	516.2	I, II	516.3	I, IV	516.4	I, IV	516.5	I, IV

## Environmental Specifications

Operating Temperature Range	-30°C to +60°C (Radio)
Water and Dust Intrusion	IP54, MIL-STD

<sup>1</sup>5% receive, 5% transmit, 90% standby

<sup>2</sup>All electrical specifications and methods refer to EIA/TIA 603 standards. Specifications shown are typical and subject to change without notice.

## Spectrum Communications

Specifications subject to change without notice. All specifications shown are typical. Radio meets applicable regulatory requirements. Version 1 09/08

