CS700 DMR Two-way Radio



CS700 adopts the latest digital technologies, which results in a high quality product which is easy to use and very cost effective.

Key Feature:

- Dual Modes (Digital + Analog)
- Superior Digital Voice
- Versatile Calls and Data Service
- Wide Band Frequencies
- IP65 & MIL810F Compliant





CS700 DMR PORTABLE RADIO

KEY FEATURES

Dual Modes (Digital + Analog)

CS700 can operate in digital or analog mode. Its analog mode is compatible with the prevalent analog system, ensuring a smooth analog-to-digital transition.

Digital mode adopts TDMA technology which decreases the equivalent Transmit time in half which lets the battery last longer. The two time slots for each frequency doubles the number of channels available allowing other applications such as a single frequency repeater and pseudo trunking.

Superior Digital Voice

CS700 adopts AMBE+2 as its vocoder, This vocoder uses advanced narrow band voice encode/decode algorithm technology. While the AMBE+2 Voice Compression algorithm has been traditionally reserved for use in satellite systems, this highly efficient voice compression algorithm has recently become available for use in radio applications. The CS700 adopts forwarder error correction(FEC) while transmitting allowing the receiving radios to recover the original voice even under high bit error environments. This avoids the noise heard in the analog mode. Sounds clear over the full communication range.

Versatile Calls and Data Service

Practical data service with easy to use interface. The CS700 adopts the standard ETSI DMR protocol and therefore can realize many different calls and data service, for a myriad of practical applications. For instance, by adopting the uniform addressing method, 16 color codes, and 2 time slots, the user can have over half billion combinations. Thus it can solve the cross talking trouble when too many people share one frequency. By the group addressing method, the user can easily call a unique person, a group of people, several groups of people, or even all people on the channel. The CS700 supports ANI, missed calls, messages, PATCS, OACSU, OVCM etc.

Wide Band Frequencies

Full Band design helps to use in the most application area.

UHF: 400-470 MHz

IP65 & MIL810F Compliant

CS700 are IP65 compliant and meets MIL810 C/D/E/F allowing the radio to be used reliability in harsh environments.

One Touch

CS700 supports One Touch feature where you can use it to send Text Message or make a call or even make a special service easily.

Scan

CS700 supports versatile scan lists to scan the activities on the channels you preset, no matter analog or digital channels.

Versatile Password

CS700 supports versatile passwords such as radio power up password and radio program password to protect your radio from unwanted intrusion.

Software Upgradable

With this feature, your dealer can upgrade your radio with new feature to meet the future requirments.

SPECIFICATIONS

General	
Power Supply	7.5V DC±20%
Frequencies-Full Bandsplit	400~470MHz
Number of Channels	1000 Channels
Maximum number of Zones	250Zones
Maximum number of Channels Per Zone	16
Channel Spacing	12.5/25kHz
Operating Temperature	-30°C ~+60 °C
Dimensions : HxWxD (mm) With Standard Li-ion battery (1700mAh)	113.5 X 54 X 34.5
Weight: (gm) With Standard Li-ion battery	275g
Average Battery Life 5/5/90 Cycle With Standard Li-ion battery	14h Digital Mode
	11h Analog Mode

Transmitter		
Frequency Stability ($-30^\circ\mathrm{C}$ to $60^\circ\mathrm{C}$, $25^\circ\mathrm{C}$ Ref	1.0 ppm	
Power Output	1W (L), 4 (H)	
Modulation Limiting	±2.5kHz@12.5kHz	
FM Hum & Noise	-40dB	
Conducted/Radiated Emission	-36dBm<1GHz, -30dBm>1GHz	
Adjacent Channel Power	−60dB	
Adjacent Transient Channel Power	−50dB	
FM Modulation Mode	12.5KHz : 11K0F3E	
4FSK Digital Mode	12.5KHz (data only) : 7K60FXD	
	12.5KHz (data+voice) : 7K60FXE	
4FSK Modulation Accuracy	$5\%@25^{\circ}\mathrm{C}$, $10\%@extreme$ temperature	
Nonactive Slot Power	−57dBm	
Audio Response (300–3000Hz)	+1~-3dB	
Digital Protocol	ETSI TS 102 361-1, -2, -3	
Audio Distortion	<3%	
Vocoder	AMBE+2™	
Ext. Microphone Connector	Compatible with MOTO 2-pin	

Receiver		
Analog Sensitivity	$0.35~\mu~V/-116dBm~(20dB~SINAD)$	
	0.22 μ V/-120dBm (12dB SINAD)	
Digital Sensitivity	$0.3~\mu~V/-117.4dBm~(BER~5\%)$	
	0.7 μ V/-110dBm (BER 1%)	
Intermodulation	TIA603 70dB; ETSI 65dB	
Adjacent Channel Selectivity	TIA603C 65dB; TESI:60dB	
Spurious Rejection	TIA603C:75dB; ETSI:70dB	
Blocking	84dB	
Rated Audio	1000mW	
Audio Distortion@Rated Audio	3%	
Audio Response (300-3000Hz)	+1~-3dB	
Conducted Spurious Emission	-57dBm<1GHz, -47dBm>1GHz ETS300086	