QUANTUN QM-2100

DMR Two-way Radio

QM-2100

*Easy Trunking

*Roaming

*TDMA Direct Mode

*Transmit Interrupt

*Mixed Channel

*2/5-tone, MDC, DTMF

*Voice Record, Voice Status

*Multi function DB15 connector

*Remote Header Mobile

*GPS option

*Bluetooth option

OPTIONAL QM-2100 Remote Kit

QM-2100 series adopts the latest digital technologies, which results in a high quality product which is easy to use and very cost effective.

Applicable U.S. Military Specifications & IP Rating

QUANTUN QM-2100 DMR Two-way Radio

Key Feature

Easy Trunking

QM-2100 series could be set to work under a group of repeaters, each repeater could provide 2 logical channels. When QM-2100 was set in Easy Trunking mode, it will listen to all the logical channels preset by an advance scan algorithm, or if PTT pressed, it will find a free logical channel to transmit. In order to get a short delay on TX/RX, it is better to use no more than 4 repeaters, i.e. 8 logical channels. There is no special requirement or settings for the repeaters used.

Roaming

QM-2100 series could be used under multi-sites which could cover a large range. The radio will find a best or better site preset to use automatically, this feature is useful for IPSC application.

TDMA Direct Mode

QM-2100 series could support two kings of TDMA Direct Mode: 1)Free mode, 2)Alignment mode

Free Mode: QM-2100 will detect the synchronization signaling and TX freely, this could ensure 2-slot communication anytime.

Alignment Mode: QM-2100 working in this mode, will need a strict synchronization signaling before realizing a real 2-slot direct Mode.

Transmit Interrupt

QM-2100 series in TX state could be stopped by a Transmit Interrupt command from another terminal or a dispatch. This feature is useful when an urgent call needing a free logical channel to use.

Mixed Channel

QM-2100 series working in Mixed Channel, could recognize the incoming analog carrier or digital carrier automatically and reply in the same way, or a default analog/digital way to set up a new call.

Voice Record

QM-2100 series could record the TX/RX voice about 2 hours.

Voice Status

QM-2100 series could send a voice status to for the RX radios to playback the corresponding voice message pre-record.

Wide Band

Allows the radio to be programmed in a wide frequency range. VHF:136-174MHz and UHF:400-470MHz.

UHF-Type

Specifications

General

Power Supply	13. 6V Dc±20%
Frequencies-Full Bandsplit	136~174MHz，400~470MHz
Number of Channels	1000 Channels
Maximum number of Zones	250 Zones (LCD)
Maximum number of Channels Per Zone	999 + 1
Channel Spacing	12.5/25kHz
Operating Temperature	-30℃~+60℃
Dimensions:HxWxD (mm) With the remote header	46 X 160 X 175
Weight: (g) Not With including installation	1315g

Transmitter

Frequency Stability (-30℃ to 60℃, 25℃ Ref)	1.0 ppm
Power Output	5W (L), 25W (M) /45W (H)
Modulation Limiting	±2.5kHz@12.5kHz/±5kHz@25kHz
FM Hum & Noise	-40dB@12.5kHz/-45dB@25kHz
Conducted/Radiated Emission	-36dBm<1GHz, -30dBm>1GHz
Adjacent Channel Power	-60dB@12.5kHz
	-70dB@25kHz
FM Modulation Mode	12.5KHz:11K0F3E/25KHz:16K0F3E
4FSK Digital Mode	12.5KHz (data only) :7K60FXD 12.5KHz (data+voice) :7K60FXE
4FSK Modulation Accuracy	5%@25℃, 10%@extreme temperature
Audio Response (300-3000Hz)	+1~-3dB
Digital Protocol	ETSI TS 102 361-1, -2, -3
Audio Distortion	<3%
Vocoder	AMBE+2™
Ext. Connector	DB15

Receiver

Analog Sensitivity	0.35 μV/-116dBm (20dB SINAD) 0.22 μV/-120dBm (12dB SINAD)
Digital Sensitivity	0.22 μV/-120dBm (BER 5%) 0.25 μV/-118dBm (BER 1%)
Intermodulation	TIA603 70dB; ETSI 65dB
Adjacent Channel Selectivity	TIA603C 70dB; TESI:70dB@25kHz TIA603C 60dB; TESI:60dB@12.5kHz
Spurious Rejection	TIA603C:75dB; ETSI:70dB
Blocking	84dB
Rated Audio/MAX Audio	2W / 3W
Audio Distortion@Rated Audio	3%
Audio Response (300-3000Hz)	+1~-3dB
Conducted Spurious Emission	-57dBm<1GHz, -47dBm>1GHz ETS300086

QUANTUN RADIO by Wireless Source
1408 Broad St., Regina, SK. CAN. S4R 1Y9
306-751-7722 / **Toll Free CAN.: 866-244-4844**
Montreal office: 450-982-1101
contact@wirelesssource.ca

www.wirelesssource.ca