



**QUANTUN ELECTRONICS LLC**

# QUANTUN QP-2100

## Main Features

### Use Time-Division Multiple-Access (TDMA)

Digital Technology doubles the number of channels on a single licensed 12.5 KHZ channel. In compliance with the DMR digital protocol.

### Dual Mode Operation

Operates in both Digital & Analogue mode. Allows for easy migration from Analogue to Digital, providing clearer voice communications in digital mode throughout the coverage area.

### Multi-Communication Operational

Versatile calling. It supports Private Call, Group Call and All Call in Digital Mode.

### Alphanumeric Keypad & Display

Allows for text messaging in digital mode and features a display for call monitoring and other features.

### Signaling

The radio comes with various signaling options. Built in CTCSS/DCS signaling in Analogue mode & DTMF, MDC1200, 2 Tone and 5 tone.

### Tri-color LED

The tri-color LED allows for notification of TX & RX status, as well as calling and scanning.

### Battery

40% longer battery duration in digital mode.

### Emergency Alarm

In case of an emergency, an alarm will be transmitted from the radio when the alarm button is pressed.

## Software Upgradeable

Allows the user to add or delete functions to keep the radio up to date with current and future software upgrades.

## Man Down (optional)

When this feature is activated the radio will enter an alarm mode if the radio remains in a horizontal position for a certain amount of time. The amount of time can be customized and pre-set by the user.

## VOX

Allows for hands free communications of the radio when the appropriate VOX accessory is attached.

## PC Tuning

Simplifies maintenance of the radio and tuning of the radio by allowing both to be done via a PC.

## 1000 channels Digital Mode

Each Channel can be programmed with several options on a per channel basis. Range 136-174 MHZ (VHF) / 400-470 MHZ (UHF).

## Water Resistance & Dust Protection

The radio meets IP-65 for ingress protection.

## Channel Annunciation

The radio will announce the channel selected for operation.

## Powerful Audio Output

A 1W rated audio output ensures clear audio even in noisy environments.

## Military Specifications

Constructed for protection against shock and vibration to maintain a high level of durability.



# QUANTUN QP-2100



IP65

FC CE IC

General Specifications	
Power Supply	7.5V DC $\pm$ 20%
Frequencies - Full Bandsplit	400 - 470MHz 136-174MHz
Number of Channels	1000 Channels
Maximum number of Zones	250 Zones
Maximum number of Channels Per Zone	16
Channel Spacing	12.5/25kHz
Operating Temperature	-30°C~ + 60°C
<b>Dimensions: H x W x D(mm)</b>	
With Standard Li-ion battery (2000mAh)	113.5 X 54 X 34.5
<b>Weight: (gm)</b>	
With Standard Li-ion battery	285g
<b>Average Battery Life 5/5/90 Cycle:</b>	
With Standard Li-ion battery	16h Digital Mode/12h Analog Mode
<b>Transmitter Specifications</b>	
Frequency Stability(-30°C to 60°C, 25°C Ref)	1.0 ppm
Power Output	1W(L),4W(UHF)/5W(VHF)(H)
Modulation Limiting	$\pm$ 2.5kHz@12.5kHz/ $\pm$ 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
Adjacent Transient Channel Power	-50dB
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°C, 10%@extreme temperature
Audio Response (300-3000Hz)	+1 ~ -3 dB
Digital Protocol	ETSI TS 102 361-1,-2,-3
Audio Distortion	< 3%
Vocoder	AMBE + 2™
Ext. Microphone Connector	Compatible with MOTO 2-pin
<b>Receiver Specifications</b>	
Analog Sensitivity	.35 $\mu$ V/-116dBm(20 dB SINAD) .22 $\mu$ V/-120dBm(12 dB SINAD)
Digital Sensitivity	.22 $\mu$ V /-120dBm (BER 5%) .25 $\mu$ V /-118dBm (BER 1%)
Intermodulation	TIA603 70dB; ETSI 65dB
Adjacent Channel Selectivity	TIA603 70dB; TESI:70dB @25KHz TIA603 60dB; TESI:60dB @12.5KHz
Spurious Rejection	TIA603C:70dB; ETSI:70dB
Blocking	84 dB
Rated/MAX Audio	750mW / 1000mW
Audio Distortion @ Rated Audio	3%
Audio Response (300-3000Hz)	+1 ~ -3 dB
Conducted Spurious Emission	-57dBm<1 GHz, -47dBm>1GHz ETS 300 086



**QUANTUN ELECTRONICS LLC**  
5441 NW 72nd Avenue, Miami FL 33166  
954-651-6300 / Toll Free USA: 888-361-0521  
sales@quantunelectronics.com

www.quantunelectronics.com