

QP-650 PROFESSIONAL TWO-WAY RADIO SPECIFICATIONS

Professional Two-Way Radio QP-650

APPLICABLE MIL-STD-810C/D/E/F

Applicable MIL-STD	810C		810D		810E		810F	
	Methods	Procedures	Methods	Procedures	Methods	Procedures	Methods	Procedures
Low Pressure	500.1	1	500.2	2	500.3	2	500.4	1
High Temperature	501.1	1,2	501.2	1,2	501.3	1,2	501.4	1,2
Low Temperature	502.1	1	502.2	1,2	502.3	1,2	501.4	1,2
Temp. Shock	503.1	1	503.2	1	503.3	1	503.4	1
Solar Radiation	505.1	1	505.2	1	505.3	1	505.4	1
Rain	506.1	1,2	506.2	1,2	506.3	1,2	506.4	1
Humidity	507.1	2	507.2	2,3	507.3	2,3	507.4	3
Salt Fog	509.1	1	509.2	1	509.3	1	509.4	1
Dust	510.1	1	510.2	1	510.3	1	510.4	1
Vibration	514.2	8,10	514.3	1	514.4	1	514.5	1
Shock	516.2	1,2,5	516.3	1,4	516.4	1,4	516.5	1

GENERAL

Frequency range	UHF: 400-470MHz/136-174MHz
Channel capacity	16
Channel spacing	12.5/25KHz
Operating Voltage	7.4V
Battery	1400mAh(Li-Ion)
Battery Life (5-5-90 duty cycle)	10 Hours
Frequency Stability	±2.5ppm
Operating Temperature	-20 °C +50 °C
Antenna Impedance	50Ω

TRANSMITTER

RF Power Output	5W/1W
Modulation	16KΦF3E/8KΦF3E
Spurious and Harmonics	≤7.5 uW
FM Noise	40dB
Audio Distortion	≤5%

RECEIVER

Sensitivity	0.25/0.28μV
Selectivity	55dB
Intermodulation	55dB
Hum & Noise	45/40dB
Rated Audio power output	500mW
Rated Audio Distortion	≤5%

FCC Approved Bands(136-174 MHz) Pending

FCC Approved Bands(400-470 MHz)

FCC ID Identifier: XMHQP-650



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- VOX OPERATION
- DTMF ANI
- IP-54



The QP-650 radio has been designed with reliable components and state of the art technology to ensure that the radio will work for many years trouble free. It has a very rugged design meeting Mil SPECS 810C/D/E &F and it is loaded with features that are uncommon for a radio of its price.

Knowledgeable users will appreciate its elegant and ergonomic design, lightweight and clear audio.

The radio is ideal for organizations that want efficient communications at an affordable price.

Radio Features

16 Channels

The radio offers up to 16 channels, with many parameters optional on a per channel basis.

Wide/Narrow Channel Space

The radio offers compatibility with 25 and 12.5 KHz systems, for easier transition in case the local bandwidth changes.

CTCSS/CDCSS

All 38 analog and 104 digital standard tones are available, as well as non-standard ones if they are required. These tones allow to share the channel with other users and keep the radio from opening the speaker for non-wanted conversations.

ANI DTMF

Each radio can have it's own unique ID number, the ID can be sent at the beginning or the end of the transmission. Improve the discipline and efficiency of channel used.

Programmable Side Button

With dual (long and short press) options, you can customize the radio choosing from several very attractive options: Vox, Power Level, Monitor, Scan, Channel lock and Battery level.

QP-650



High/Low Power

With a press of the side button, the power level can be switched, from 5w to 1w to save battery and increase operation time, or the other way, to increase the range.

Priority Scan

If several channels are scanned, you can always be aware of the important calls by defining one Priority Channel.

Monitor

This feature will allow you to check for channel activity before pressing PTT.

VOX Operation

If hands free operation is required, you can activate the transmission by just talking, it requires the proper accessory to be connected to the radio.

Selectable Squelch Level

The squelch is adjustable, based on requirements, it can be tighten in noisy environments, or loose, to maximize range.

Time Out Timer

This feature limits the amount of time of a transmission, to avoid the channel to be blocked and protect the radio, in case the PTT is stuck on active mode. It also can increase efficiency by limiting the length of each call.

Busy Channel Lockout

If a different CTCSS/CDCSS is detected on a channel, TX is blocked on that channel to avoid interference with other talk groups while the conversation last.

Battery Save

If the radio does not Transmit or Receive signals for certain time, it will shut off certain internal circuits, to save energy, for a short time, pressing any button will restore normal operation. This feature helps to extend the battery time.

Low Battery Alert

If the battery falls below the normal level, an audible tone and a visual led will warn the user that the battery needs to be charged or replaced.

Tail Elimination

This feature will eliminate the annoying noise at the end of the transmission, after the carrier drops. It delays the carrier and closes the speaker before it ends.

Wire Cloning

You can copy the programming of one radio to another.

PC Programmable

The radio has many options to allow it to be customized to the user needs. Many parameters can be defined on per channel basis.

Accessories

“Quantun Electronics offers a complete line of audio accessories to enhance the operation of your radio. Please ask your Quantun reseller about them”.

