

General Specification

| | | |
|-----------------------------------|---|--------------------------------|
| Frequency Range | UHF:350-390MHz 400-480MHz | VHF:136-174MHz [A720T(Ex)only] |
| Channel Capacity | 32CH/1600CH | |
| Channel Spacing | 25 kHz/12.5 kHz | |
| Operation Temperature | -25 °C ~ +60 °C | |
| Frequency Stability | ±1.5 ppm | |
| Operation Voltage | 7.2VDC | |
| Antenna Impedance | 50Ω | |
| Microphone Impedance | 2.2kΩ | |
| Battery Life (5-50 duty cycle) | Li-ion DC:2.7V 2400mAh | |
| Dimension(height*width*thickness) | A720T(Ex):125.9mm x 53.9mm x31.8mm A780T(Ex):125.9mm x 53.9mm x34mm | |
| Weight | 305g (with battery and antenna) | |

Transmitter

| | | |
|------------------------------|---------|-----------------------------------|
| Sensitivity | Analog | $23 \leq 0.22 \mu V (12dB SINAD)$ |
| | Digital | $0.22 \mu V (BER 5\%)$ |
| SNR (Signal-To-Noise Ratio) | | $25K \geq 45 dB$ |
| Adjacent Channel Selectivity | | $12.5K \geq 40 dB$ |
| Intermodulation | | $25K \geq 70 dB$ |
| Spurious Response Rejection | | $25K \geq 65 dB$ |
| Audio Output Power | | $\geq 70dB$ |
| Rated Audio Distortion | | $\geq 1000 mW$ |
| | | $\leq 5\%$ |

Receiver

| | |
|--------------------------|--|
| RF Power | $\leq 3.5W$: rated:2.5W |
| FM Modulation | 25kHz: 16KΦF3E 12.5kHz: 8KΦF3E |
| dPSK Digital Modulation | 12.5kHz data 7K60FXD 12.5 kHz data and voice 7K50FXW |
| Digital Vocoder Type | AMBE+2TM |
| Digital Protocol | ETSI TS102 361-1,-2 |
| Harmonic | $\geq 70 dB$ |
| Rated Audio Distortion | $\leq -45 dB @ 25kHz$ $\leq -40 dB @ 12.5kHz$ |
| Audio distortion | $\leq 5\%$ |
| Max. Frequency Deviation | 5 kHz @ 25kHz 2.5 kHz @ 12.5kHz |

• All specifications are subject to change without notice due to continuous development.

Standard Accessories



Optional Accessories: Multi AC adapter, Earphone, Programming cable.



ABELL INDUSTRIES CO., LTD
Website: www.abell.com.cn E-mail: sales@abell.com.cn

Dealer Area

ABELL®



A720T(Ex)/A780T(Ex)

Intrinsically Safe DMR Two Way Radio

- Gas, dust, dual explosive-proof
- IP67 dustproof and waterproof
- DMR two slots, digital & analog dual mode
- Diversified remote emergency alarm
- Produced complying to intrinsically safe standards



Intrinsically Safe standard:

Comply to the standard EX ia IIB T4, the radio can be used at the sites with inflammable gas, also at the sites with high level dust. A720T(Ex) is the dual explosive proof radio for both gas and dust, which fits for use in various fields, like firefighting, chemical, petroleum, and natural gas etc.

Crystal clear voice:

Comply to ETSI DMR digital standard, with the digital noise reduction, and digital audio encryption technology, the radio provides crystal clear and loud voice, even at the noisy sites or with the weak signal received.

High Interference:

A720T(Ex) use the AFC discrete VCO design, which leads the discrete receive channel in narrowband, maintain the high level anti-interference parameters. Support the use in the complex electromagnetic environment.

Harsh IP proof level:

Adopt the IP67 dustproof and waterproof design, the radio is submersible at the depth of 1 meter up to 30 minutes, function well. The wonderful sealing ensures the board inside un-eroded in the harsh usage cases.

High performance explosive safe battery:

2400 mAh high performance Li-ion battery cell originated from Panasonic, with super strict explosive proof circuit, maintains both the safety and longer use time, the maximum standby time is up to 60 hours.

Certificate complied:

Intrinsically safe CNEx192542X
IP67 dustproof and waterproof
FCC
CE

