

# Specification



# Professional Digital Radio

## Small in Size, Huge in Performance

### General

Digital Protocol	ETSI TS102 361-1, -2, -3, -4(optional)
Frequency	UHF1: 400-470MHz UHF3:350-400MHz VHF: 136-174MHz
Channel Capacity	1024
Zone Capacity	64
Channel Spacing	12.5kHz/20KHz/25KHz
Frequency Stability	±0.5ppm
Operating Voltage	7.4V
Battery Capacity	2600mAh(standard)
Battery Life	Analog: 16 Hours Digital: 20 Hours (5: 5: 90 working cycle, high power transmission)
Size (H x W x D)	100×54.5×36.5mm (without antenna)
Weight	290g
Screen	1.75-inch transfective LCD, 240×180
Vocoder	AMBE++
Bluetooth	BT2.1+EDR / 4.0 (optional)
Location	GPS / Glonass (optional)
Man down / Vibration	Support
Real-time Clock	Support
Encryption	Support 40bit basic encryption 128/256bit AES encryption is optional

### Environmental

Operating Temperature	-30°C ~ +60°C
Storage Temperature	-40°C ~ +85°C
ESD	IEC 61000-4-2 (level 4) ±8kV (Contact) ±15kV (Air)
Dust and Water Resistance	IP68
Reliability	MIL-STD-810G

### GPS

Accuracy specs are for long-term tracking (95th percentile values >5 satellites visible at nominal -130 dBm signal strength)

TTFF (Time to First Fix) - Cold Start	<60s
TTFF (Time to First Fix) - Hot Start	<10s
Horizontal Accuracy	<10m

### Receiver

Sensitivity (Analog)	0.18uV(12dB SINAD)
Sensitivity (Digital)	0.18uV (5% BER)
Adjacent Channel Selectivity	60 dB@12.5KHz/70 dB@20/25KHz (TIA603A) -1T
	45dB@12.5KHz /70 dB@20/25KHz (TIA603D) -2T 60dB@12.5KHz /70 dB@20/25KHz ( ETSI )
Intermodulation	70 dB (TIA603D)
	65 dB (ETSI)
Spurious Rejection	70 dB (TIA603D)
	70 dB (ETSI)
Blocking	80dB(TIA603D)
	84dB(ETSI)
Co-channel Rejection	-12~0 dB @12.5KHz/-8~0 dB @20/25KHz
Hum and Noise	-40 dB@12.5KHz /-43 dB@20KHz /-45 dB@25KHz
Rated Audio Power	0.5W
Max Audio Power	2.0W
Rated Audio Distortion	≤3% (typical value)
Audio Response	+1~-3dB (TIA603D)
Conducted Spurious Emission	-57 dBm (TIA603D)

### Transmitter

Power Output	1W/4W (UHF1/UHF3), 1W/5W (VHF)
FM Modulation	12.5KHz: 11K0F3E / 20KHz: 14K0F3E / 25KHz: 16K0F3E
	12.5KHz Data Only: 7K60F1D&7K60FXD
4FSK Digital Modulation	12.5KHz Voice Only: 7K60F1E&7K60FXE
	12.5KHz Voice And Data: 7K60F1W
Conducted/ Radiated Emission	-36dBm ≤1GHz ; -30dBm >1GHz
Modulation Limiting	±2.5KHz @12.5KHz /±4KHz @20KHz /±5.0KHz @25KHz
FM Hum and Noise	-40 dB@12.5KHz /-43dB@20KHz /-45 dB@25KHz
Adjacent Channel Power	60 dB@12.5KHz /70 dB @20/25KHz
Audio Distortion	≤3% (typical value)
Audio Response	+1~-3dB(TIA603D)

General Disclaimer:  
The specifications in this document are in accordance with the applicable standard test. Due to the continuous technology development, Axiom may change the specifications without notice.



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## Features

### Full Encryption

Support 40bit basic encryption. 128/256bit AES encryption are optional. It also supports lone worker, alarm, man-down and other functions to protect users' safety.

### Loud and Clear Voice

With a 2W speaker and optimized audio design, AXP665 ensures clear communication even in a noisy environment.

### Compact Design

Only 290g(antenna and battery included) in weight and 100mm in height. Portable and easy to operate. The surface is designed with anti-slip texture, making it comfortable to hold and anti-slip even in wet environments.

### Military Standard

MIL-STD-810G rated, AXP665 is resistant to dropping and shocks at various levels.

### Large-capacity Battery

With a 2600mAh large-capacity battery and digital power reduction technology, AXP665 can work for at least 20 hours in digital mode(5:5:90), meeting the needs of long work shifts.

### Complete Services

In addition to basic DMR voice and data services, AXP665 also supports many optional features such as GPS/BDS , Bluetooth , VOX , etc.

### Digital-and-analog Compatible

Digital-and-analog compatible, AXP665 realizes the smooth evolution of the system. It also supports digital direct/repeater dual-time slots and automatic cross-site roaming.

### IP68 Protection

IP68 rated, AXP665 is resistant to water and dust, ensuring normal operation in extreme environments.

## Scenarios



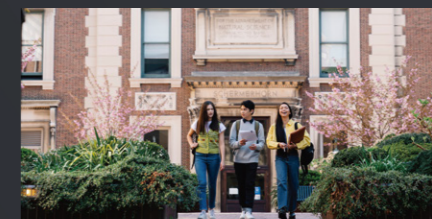
Hotel



Scenic Spot



Hospital



School

## Accessories

### Standard



Desktop Charger



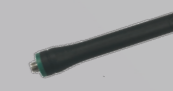
Belt Clip



2600mAh Li-ion Battery



Power Adapter



Antenna

### Optional



8-way Charger



Bluetooth Earphone



Bluetooth PTT Ring



Transparent Tube Earphone



C-Style Earphone



Remote Microphone



Programming Cable