

Portable Multi Mode Repeater AK833

AK833 is a portable repeater that also doubles up as a radio. Lightweight and compact design, it can be used as a manpack with ease. The AK833 ensures a fast and smooth network coverage communication especially during a mobile mission.



Lightweight
Manpack

World's First
Ad Hoc
Communication Solution

Radio
&
Repeater

Specifications

General

Frequency Range	136-174MHz / 400-470MHz
Standards Supported	MPT/ PDT/ DMR Tier I, II & III / Ad Hoc
Dimension (HxWxD)	260X158X51.5mm (Not inc. antenna)
Weight	3.09kg (Not inc. antenna)
Battery	16Ah
Operation Voltage	DC 12V
Battery Life	31Hours(5/5/90 duty cycle)

Receiver

Analogue Sensitivity (12dB SINAD)	-126dBm (0.11μV)
Digital Sensitivity (5% BER)	-126dBm (0.11μV)
Adjacent Channel Selectivity	≥60dB (12.5KHz channel) / ≤70dB (25KHz channel)
Intermodulation	≥70dB
Spurious Response Rejection	≥70dB
Blocking	≥84dB
Co-channel suppression	≥-8dB
Conducted Spurious Emission	9kHz~1GHz ≤ -36dBm 1GHz~12.75GHz ≤ -30dBm

Transmitter

RF Power	2~25W
Frequency Stability	±1.5ppm
Adjacent Channel Power	≤-60dB (12.5KHz channel) / ≤-70dB (25KHz channel)
Conducted / Radiated Emission	<1GHz ≤ -36dBm >1GHz ≤ -30dBm
Digital Vocoder Type	NVOC & Ambe++

Environmental

Operating Temperature	-20°C ~ +55°C
Storage Temperature	-40°C ~ +65°C
Operating Humidity	30% ~ 93%
Storage Humidity	≤ 93%

GNSS

Constellation Support	GPS / BDS
TTF(Time To First Fix) Cold Start	<1 minute
TTF(Time To First Fix) Hot Start	<10 seconds
Horizontal Accuracy	<5 metres CEP

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

Ad Hoc Communication Solution

The AK833 features fast and flexible networking, which can automatically join an existing network as soon as it is turned on or when it is within range.

