

## ABELL TRANSCEIVER, PROVED IN ANTARCTICA

**ABELL**<sup>®</sup>

### General Specification

Model	A85T
Frequency Range	VHF:136-174MHz UHF:400-470MHz, 410-480MHz, 350-400MHz
Channel Capacity	16CH
Channel Spacing	25 KHz/ 12.5 KHz
Operation Temperature	-25 °C~+60 °C
Operation Voltage	7.4VDC
Antenna Impedance	50Ω
Microphone Impedance	2. 2KΩ
Battery Life (5-5-90 duty cycle)	1600mAh Li-ion: Analog 13.3 hours Digital 17.9 hours 2600mAh Li-ion: Analog 21.6 hours Digital 29.1 hours
Dimension(height*width*thickness)	135 mm×53 mm×33 mm
Weight	318g(with battery and antenna)
Dust and Water Intrusion	IP66

### Receiver

Sensitivity (12dB SINAD)	Analog 25K $\leq$ -121dBm 12.5K $\leq$ -119dBm Digital 0.3 $\mu$ V/BER5%
SNR (Signal-To-Noise Ratio)	25K $\geq$ 45 dB 12.5K $\geq$ 40 dB
Adjacent Channel Selectivity	25K $\geq$ 65 dB 12.5K $\geq$ 60 dB
Intermodulation	25K $\geq$ 60 dB 12.5K $\geq$ 55 dB
Spurious Response Rejection	$\geq$ 65 dB
Audio Output Power	$\geq$ 1000 mW
Rated Audio Distortion	$\leq$ 5%
Frequency Stability	$\pm$ 2.5ppm

### Transmitter

RF Power	High: UHF 4W / VHF 5W Low: 1.5W
FM Modulation	25K/16K $\Phi$ F3E 12.5K/8K $\Phi$ F3E
4FSK Digital Modulation	12.5KHZ data 7K60FXD 12.5KHZ data and voice 7K60FXW
Digital Vocoder Type	AMBE++ or SELP
Digital Protocol	ETSI-TS102 361-1,-2
Harmonic	$\geq$ 70 dB
SNR (Signal-To-Noise Ratio)	25K $\leq$ -45 dB 12.5K $\leq$ -40 dB
Rated Audio Distortion	$\geq$ 5%
Frequency Stability	$\pm$ 2.5 ppm
Max. Frequency Deviation	25K $\leq$ 5 kHz 12.5K $\leq$ 2.5 kHz

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



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Dealer Area

**ABELL**<sup>®</sup>  
Voice of Abell, Crisp as an Apple

**DMR**

# A85T

Super Dust and Iron Scrap Proof Radio

- ▶ Patent design in dustproof speaker
- ▶ Durable structure for harsh environment
- ▶ TDMA 2 slots at direct mode
- ▶ Dual mode (digital & analog)

**ABELL IS ABLE** to ensure your professional wireless communication.

## Main Features



### Super Scrap Iron Proof

The iron scrap proof structure with patented design can effectively prevent iron scrap from adsorbing to the speaker magnets, which will increase the life of radio speakers by 300%.



### Durable and Sturdy

The high quality aluminum chassis and PC+ABS housing make the A85T can withstand a natural drop of 1.5 meter, which greatly improves the reliability of it.



### Detachable Speaker

The speaker is very easy to be replaced and cleaned up with a detachable structure. The maintenance time of the speaker is almost zero. And the usage rate can be increased by 50%.



### TDMA 2 Slots at Direct Mode

Utilize the power of the 2-slot TDMA DMR standard to double the capacity of your 12.5 kHz channel – without the need for a repeater.

## Application



Steel manufacturing



Automobile industry



Shipbuilding industry



Coal transportation



Construction and light industry



Mining

## Standard Accessories



Charger  
BC-82



Li-ion battery  
AB-L1682



Belt clip



Antenna



Hand strap

## Optional Accessories



AM-EL(s)



CA-6



AB-L2685  
2600mAh Li-ion battery



TH-AE002  
Earhook style earphone



Leather carrying  
case



AD-US-E01  
USB Programming  
Cable

