

# VITAL ALERT<sup>®</sup>

## OVERVIEW CANARYTALK

Vital Alert Through-the-Earth technology enables secure, emergency and day-to-day text, voice and data communications in some of the most hostile and difficult communication environments in the world such as tunnels, sewers, subways, buildings, mines and military operations.

CanaryTalk is a highly portable, operational and critical use communications solution ideal for application in infrastructure construction, maintenance and operations, public safety practices and military operations when personnel need to move easily while using voice and data transmissions.

CanaryTalk can be used both above and below ground where typical radios do not work, including underground urban areas such as sewers, tunnels, garages. It is quick to set up and can integrate with existing communication infrastructure or function independently.



## CANARYTALK SPECIFICATIONS

### ELECTRICAL SPECIFICATIONS

Operating Frequency	1 to 9 kHz (unlicensed) VLF band
Signal Type	Digitally modulated magnetic field
Data Throughput	Up to 1kbps full duplex
Text Communication	Via external keyboard
Voice Communications	1 circuit, half duplex (PTT) at 800 bps
Power Supply	Internal Li-ion with external charger
Battery Endurance	> 8 hours continuous transmission
Range Through Solid Material (Vertical or Horizontal)	> 100m (with standard 5m antenna) Up to 300m with external loop antenna

### USER INTERFACES

Radio Switch	On/Off/Charge
Status Display	Receive signal and battery levels
Indicators	TX, RX message, alarm

### EXTERNAL INTERFACES

Audio	Integrated fist mic with PTT button
Sensor Data	RS-485, 2 x Digital Input (isolated 5V)
Control Output	2 x Digital Output (isolated 5V) 2 x Form C Relay
USB	1 x USB 2.0 port
System Configuration	Canary GUI Windows PC based configuration software

### OPTIONS

The following factory installed options are available:

1m loop antenna (25m range)
VHF/UHF Radio Interface
Remote Control Unit Interface
External LED Lamp

### REGULATORY COMPLIANCE

The CanaryTalk TTE Terminal is designed to the following regulatory standards:

FCC Part 15 Class A
ICES-003
CSA/UL1950



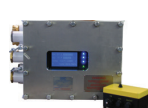

### PHYSICAL SPECIFICATIONS

The system is designed to operate in non weather-protected and underground environments. Environmental specifications are compliant with MIL-STD-810G.

Dimensions	40.5cm x 22cm x 34cm (16" x 8.75" x 13.5")
Weight	7.4kg (16lbs)
Operating Temperature	-35° to + 45°C
Humidity	0 to 95%
Vibration	MIL-STD-810G ground transportation
Shock	MIL-STD-810G transit drop test
Water, Dust Ingress	IP-65, MIL-STD-810G rain

## ALL PRODUCTS

All products are designed for seamless interoperability to accommodate flexible configuration.

INFRASTRUCTURE, PUBLIC SAFETY, MILITARY	MINING	WIRELESS ACTUATION	
			
CanaryTalk	CanaryCommPac	CanaryComm-IS	CanaryBlast CanaryRemote
TTE voice and data communication where depth is a priority over portability	TTE voice, text and data communication where ultra-portability is a priority over depth	Intrinsically safe system for TTE voice, text and data communication	TTE remote control unit for one-way wireless detonation and remote actuation
7.4kg	2kg	64kg	0.5kg
Portable	Portable	Fixed	Portable
Two Way Link	Two Way Link	Two Way Link	One Way Link
Voice, Data	Voice, Data	Voice, Data, Text	Data
Up to 300m depth	Up to 300m depth	Up to 300m depth	Up to 70m
5m loop antenna	Variable	Variable loop antenna	Integrated ferrite antenna

Note: The range at a particular location is dependent on the propagation conditions and noise level