



TerraCOMM™ Transceiver  
(Antenna and headset not shown)

## TerraCOMM™ Tactical Underground Communication System

### Features

- Digital
- Push-to-Talk (PTT)
- High quality voice
- Bidirectional
- Direct, through-earth link
- No repeaters or breadcrumbs
- Lightweight, man-wearable
- No RF signature
- All weather / environment



Ultra Electronics' TerraCOMM™ is a wireless, two-way, through-earth voice communication system designed for tactical underground operations.

TerraCOMM™ provides personnel in subterranean environments — tunnels, caves, culverts, municipal infrastructure — with the ability to speak with personnel located above ground.

TerraCOMM™ enables direct, point-to-point communications and does not rely on repeaters or intermediary nodes to establish a link. The robust signal can penetrate physical barriers, line of sight obstructions and conductive media, enabling secure and reliable communications in RF-denied environments, making it well-suited for counter-tunnel and subterranean interdiction operations.

TerraCOMM™ is a state-of-the-art Push-to-Talk (PTT) digital communication system that employs the latest in Digital Signal Processing (DSP) technology, delivering exceptional speech quality.

The system comprises compact, lightweight modules tactically built for underground operations and includes:

- Transceiver Module
- Transmit Antenna
- Receive Antenna
- Mic and Earphone Assembly

TerraCOMM™ equipment has been designed to withstand extreme environmental conditions, temperatures, shock and vibration. Its ruggedized packaging is waterproof and submersible.

TerraCOMM™ communications are highly localized. The system does not generate far-field (RF) emissions and has an inherently low probability of detection and intercept.

Maritime Systems

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# Technical Specifications

## TerraCOMM™

### PHYSICAL PARAMETERS

Height.....	9 in (22.8 cm)
Width.....	2.75 in (6.98 cm)
Depth.....	2.31 in (5.88 cm)
Weight.....	3.3 lb (1.5 kg)
User Controls.....	Power, Volume
Connectors.....	Antenna, audio I/O
Indicator Light (green)	
• Power On Indicator.....	1 flash every 5 seconds (0.2 Hz)
• Low Battery Indicator.....	1 flash every 0.5 seconds (2 Hz)

### GENERAL PARAMETERS

Transmit Antenna.....	Inductive loop
Receive Antenna.....	Omnidirectional array
Transmission.....	Digital; PTT
Operating Frequency.....	VLF
Audio Bandwidth.....	300 to 3,000 Hz
Transmit Output.....	10 A-m <sup>2</sup>

### GENERAL PARAMETERS CONTINUED

Power Supply.....	6 x CR123 3V Li
Battery Type.....	Field-replaceable; non-rechargeable
Range.....	50 m, depending on conditions
On-Time.....	12 hrs (avg)

### ENVIRONMENTAL

Protection.....	IP68
Testing.....	MIL-STD 810E
Temperature (Operational).....	-10°C to +55°C
Temperature (Storage).....	-40°C to +60°C



making a difference

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 BR808445 v3  
 Printed in Canada