

## TRC 5010P

Programmable personal hand-held UHF transceiver



### Combat group communications, out of sight or out voice range

- Normal range: 150 m in urban areas – 800 m in open areas
- Any battle theatre, including urban: UHF band
- High network density possible

### Soldier's tactical radio

- Headset and PTT interface
- Subcompact: 180 cm<sup>3</sup>
- Optimized transmission power
  - High autonomy: 12 hours
  - Discretion
  - Light weight: 150 g
  - Re-usable channels

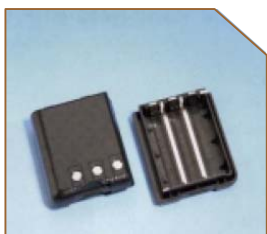
**PC programmable**

**Low possession cost**



# TRC 5010P

## Programmable personal hand-held UHF transceiver



ALI 138/ALI 139



ETT 124



ALT 169



POR 159

The TRC 5010P is designed to enable all combat soldiers to be equipped with a radiocommunication facility, perfectly compatible with existing HF and VHF radiocommunication systems.

Operational experiment and trials have resulted in a miniature handheld radio which is extremely quick and easy to use, giving maximum combat soldier efficiency in action.

Massive use of radio within the combat group is made possible by a dual technology which is:

- compliant with military specifications (temperature, waterproofing, impacts...)
- easily integrated (very compact and lightweight)
- compatible with many « off the shell » accessories
- inexpensive

The TRC 5010P provides short-range communication networks with no infrastructure, intended for combat groups and units (10 to 40 soldiers). The service provided is an audio conference with transmit-receive facility. The TRC 5010P can be programmed for 1 to 20 channels, and each channel can be reused by other groups which are not in the same immediate area. This technique makes the personal radio available to all groups and units of an army deployed on the battlefield.

### Accessories

#### Power supplies ALI 138/ALI 139

Dual power supply source: batteries or cells (pack holding three R03 cells)

Battery: Type NiMH - Capacity 600 mAh - Weight 50 g

#### Communication headset ETT 124

Can be worn with or without a combat helmet

Remote PTT control (on finger)

Leave one ear free - Ambient noise can be heard; only one earpiece activated (left or right)

Lightweight: 150 g

#### Battery charger ALT 169

Power sources: 220 V AC and 12 V DC

Capacity: 4 batteries - Rapid charge: 2.5 hours -

Type of charge: automatic

#### Kit 500 Programming tools

Software, cable and manual for PC programming

Programming of the number of channels and the frequency of each channel

#### Carrying bag POR 159

Allows operation of radio set

Hook for attaching radio set to soldier's harness

## FEATURES

### General characteristics

- Mode: analog fixed frequency
- Frequency band: 420-450 MHz
- Channel separation: 25 kHz
- Number of channels: 1 to 20 (by programming)
- Modulation: F3E
- Squelch sensitivity: - 120 dBm
- Battery: 4,5 V
- Autonomy (cycle 8/1/1): > 12 h
- Typical range:
  - 800 m in open areas
  - 150 m in urban conditions

### Transmission characteristics

- Nominal power: 10 mW
- Frequency stability:  $\pm 5$  ppm

### Reception characteristics

- Sensitivity (20 dB SINAD): - 115 dBm
- Max output signal: 1.1 V/8  $\Omega$
- Adjacent channel protection: 55 dB
- Spurious signal rejection: 50 dB
- Bandwidth: 300-3000 Hz

### Interfaces

Audio interface (mike, loudspeaker, transmit button)

### Structural and environment characteristics

- Weight: 150 g
- Volume: 180 cm<sup>3</sup>
- Dimensions, excl. antenna (WxLxT): 55x109x30 mm
- Antenna length: 7.5 cm
- Structural characteristics comply with requirements of standards GAM EG13 and MIL-STD 810 E
- Temperature range:
  - Storage: - 30 °C at + 70 °C
  - Operation: - 20 °C at + 60 °C
- Relative humidity: 93 % at 40 °C
- Resists immersion in carrying bag: under 50 cm of water for 15 s
- Drops: five 1 m drops on a wooden board

### Thales

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