

AFT1001 – Analogue Field Telephone

User-friendly Analogue Field phone for harsh environment

Functionality:

AFT1001 is family of lightweight, ruggedized, Microcontroller based and portable 2-wire analogue field telephones for voice communication capable of working in Local Battery (LB) mode Central Battery (CB) mode and Central Battery Signalling (CBS)/Local Battery Radio (LBR) mode.

Models*

AFT1001 – Supports LB, CB and LBR mode

AFT1001-S – Supports LB, CB, CBS mode

AFT1001-N – Basic LB, CB and LBR phone without memory

Applications:

LB: Capable of working with another magneto telephone of similar kind or with a magneto exchange.

CB: Auto telephone with DTMF or Pulse dialling facility from built-in keypad.

CBS: Model with CBS feature support CBS signalling which is low powered CB mode for long distance operation.

LBR: Pressel switch used for remote radio operation, connected on network system using additional Radio Adaptor Unit (RAU) for remote operation of Radio set connected through Interface Cable

Design:

- Microcontroller based state-of the art design.
- H-350/U type handset, compatible with helmet.
- In accordance with MIL Standard.
- Programmable Signal level in CB and CBS mode
- Polarity independent external battery connection

Features:

- Push-To-Talk handset function
- Adjustable levels for acoustical signal, including whisper mode
- Audio and LED indication for incoming call
- Easy to use push buttons with backlight
- Auto Answer feature for use with headset
- Storage of up to 10 pre-defined numbers in memory
- Standard batteries (3 no's of 1.5V C-type) or external battery (6V to 24V) used for LB function
- Battery quality status with LED indication
- Line man test facility
- Ringing Signal through Push Button
- Line Terminal – Spring Loaded Type
- Membrane type Keypad



Design Patent:

AFT1001 design patent No. is 264378

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Specifications

Line / Transmission

Impedance (@1KHz)	600 Ω
Transmission length	Up to 30 km in LB mode Up to 10 km in CB mode Up to 15 km in CBS mode, using standard field cable WD1-TT (or equivalent)
Speech range	55dB
Speech output	> 900mV RMS

Mode of Operation

Central Battery (CB)	DTMF or Pulse Dialling, Auto Answer
Central Battery Signalling (CBS)	DTMF or Pulse Dialling
Local Battery (LB)	Magneto
Local Battery Radio (LBR)	Remote Radio Operation (using OPTIONAL RAU)

Incoming Ring Sense

Ringing voltage	> 25V AC
Ringing frequency	16 - 25 Hz

Acoustical Interface

Frequency range	300 - 3400 Hz
Microphone	Dynamic
Speaker	1000 Ω impedance
Side tone	> 14dB

Battery Voltage (LB)

Internal	3 of 1.5V C-type
External	6V – 24V DC
Max current drain	180 mA
Max speech current	8 mA
Idle current	< 1 mA

Ringing Generator Voltage (LB)

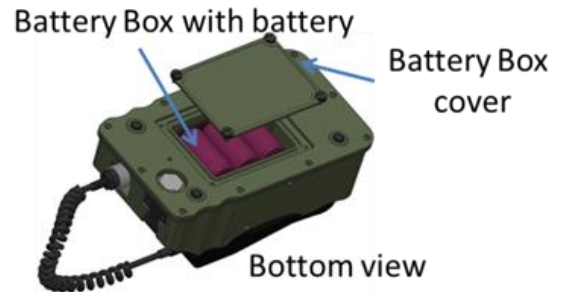
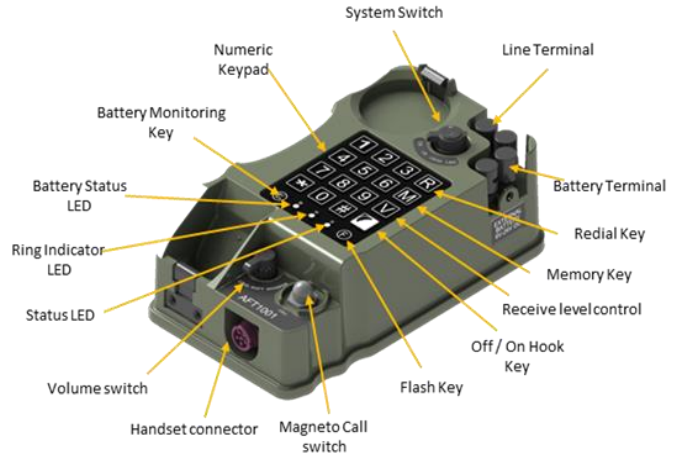
Min. voltage	> 90V (at no load)
Frequency	25Hz \pm 2Hz

Environmental Data

Operating Temperature	-30°C to +60°C
Storage Temperature	-40°C to +70°C
Relative Humidity	95 % (+50°C)
Rain	100 mm/hour

References

MIL-STD-810G	Temperature and mechanical stress
MIL-STD-461E	EMI/EMC
EN-61000-4-2	ESD
EN-61000-4-5	Lightening



Reliability

MTBF	> 85,000 hours
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Dimensions and Weight

Height:	80 mm (without handset)
Height:	109 mm (with handset)
Width:	122 mm
Length:	215 mm
Weight:	1,8 kg (with handset)
Weight:	2,5 kg (with handset, batteries, manual and carrying bag)

* For model specific features and ordering part number correspondence on below email.

This publication is not to be regarded as a complete system specification, or to be used as a contract document. We reserve the right to change the design or specifications without prior notice.