

KEY FEATURES



Integrated WWAN capability for multi-unit target data integration

Integrated to Trimble GPS with SIRFstarIII and SIRFInstantFixII

Integrated with Ultra-High and High performance compact Phased Array antennas

Multiple antenna range options

Integrated High Performance Receiver and DSP system

Integrated 3 axis compass accurate to 0.1 degrees

Full VGA Nomad® display and SWVGA YUMA® display

Integrated multi-targeting hunting and mapping software

Playback and record capability



A SOLUTION TO "ICOM CHATTER"



The Firestorm "iHAMRH" (insurgent HAM Radio Hunter) patent pending technology has been designed and developed to hunt and locate "ICOM CHATTER". It is a first in a series of "iRDF" (intelligent Radio Direction Finding) solutions being offered by Firestorm. These iRDF products provide a compact high performance device that weighs 3.2 lbs and can hunt over a 100 Miles.

Unlike Loop and Doppler antenna systems, the very selective directional Phased Array antenna has been demonstrated to have a 2 degree aperture at 2 kms, or 20 sq. meters area.

The iHAMRH system is not dependant on operator intervention during the "Hunt" phase, reducing the human interpretation error possibility, so every user hunts like a PRO.

The iHAMRH is comprised of the following elements:

- 1) Phased Array Antenna
- 2) High Performance Receiver
- 3) State of the Art DSP processing
- 4) Integration to Trimble Nomad PDA or Yuma tablet computer

5) Automatic or Manual AI based Hunting System

6) Automatic Mapping of recorded results

The Compact Phased Array antenna design is superior to a 4 element 42" YAGI antenna, yet is compact and is only a 12 inch boom length. With it's flexible antennas, it is MILITARY ready.

Two antenna types are available. *Ultra-High Performance* with 10 Mhz spacing for coverage between 140-150 Mhz, for example. Or *High Performance* wide band are:

- 136 Mhz - 174 Mhz VHF
- 380 Mhz - 450 Mhz low band UHF
- 440 Mhz - 512 Mhz high band UHF

Custom frequency antennas are available.

The software controlled high performance radio delivers flexibility of 100 - 500 Mhz capability using interchangeable antenna systems. All mode of transmissions are detectable. The iHAMRH has a -132 dbm sensitivity.

Firestorm iHAMRH[®] User Interface with multiple targets



The Digital Signal Processing subsystem, takes the output from the receiver and marries it to the 3 axis compass that is accurate to 0.1 degree, providing unsurpassed SIGINT data. The DSP coordinates with the high accuracy Trimble GPS, signal strength and compass data to provide a real time data stream to the Nomad[®] rugged handheld computer or YUMA[®] rugged tablet computer.

Firestorm has developed an Artificial Intelligence based hunting technology that runs on both the YUMA[®] tablet computer and Nomad[®] PDA. The targeting system can run in either automatic or manual mode. In auto mode, the operator starts the "Hunt" phase and rotates 360 degrees one way and then 360 degrees the other way, and in 40 seconds the hunt is over.

The Mapping system then displays the results and determines the ridge

OPTIONAL ANTENNA CONFIGURATIONS				
	Performance	Band	Frequency	Availability
SAR Civilian	ULTRA	Aviation	121.500	Now
CSAR Military	ULTRA	Military	243.000	Now
136 - 150 Mhz	ULTRA	HAM VHF	136 - 150 Mhz	Now
150 - 162 Mhz	ULTRA	Commercial VHF	150 - 162 Mhz	Spring 2011
160 - 174 Mhz	ULTRA	Commercial VHF	160 - 174 Mhz	Spring 2011
136 - 174 Mhz	HIGH	Wide VHF	136 - 174 Mhz	Spring 2011
212 - 220 Mhz	ULTRA	Alzheimer/HAM	212 - 220 Mhz	Now
380 - 450 Mhz	HIGH	HAM UHF	380 - 450 Mhz	Spring 2011
450 - 512 Mhz	HIGH	Commercial UHF	450 - 512 Mhz	Spring 2011

OPTIONAL COMMUNICATION CONFIGURATIONS			
	Performance	Band	Availability
Internal Modem	MEDIUM	Cell 2G+	Now
Iridium Modem	LOW	Satellite	Spring 2011
USB Modem	ULTRA	Cell 4G	Now

lines along the vector providing GPS locations of each of the ridge lines on that heading in seconds. Truly a revolution in SIGINT technology.

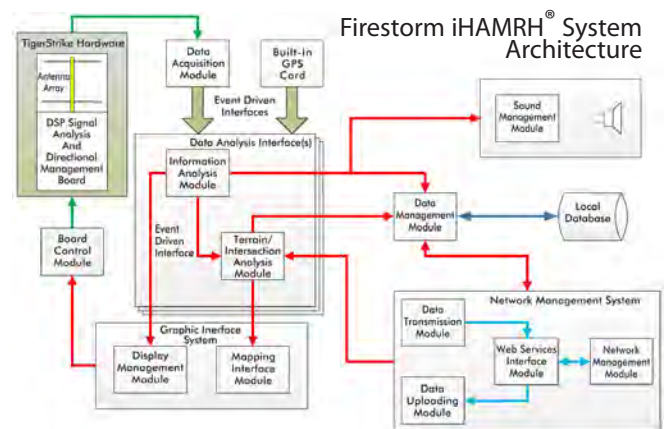
The results are recorded and can be played back on a PC version of the iHAMRH[®] software to provide additional INTEL .

The Nomad[®] version is based on the Windows Mobile 6.5 and offers a smaller footprint and lower cost version of the iHAMRH[®].

The YUMA[®] version offers longer duration batteries and a 7" screen. The Windows 7 version offers better mapping resolution and all the functionality of the current laptop fielded by the teams.

Communications can be handled via the optional module that includes the Iridium satellite modem for two way secure remote communications with low power usage.

The Multi-mission capability means this same device can perform Combat Search and Rescue (CSAR) with just an antenna change.



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