smith myers

ARTEMIS

A cellular handset geolocation and communication capability specifically designed for Search and Rescue.

Uses any mobile phone as a personal locator beacon

ARTEMIS is an award winning cellular handset identification & geolocation system developed specifically for the challenging environment of Search and Rescue (SAR) Operations. Using ARTEMIS, the search and rescue team can accurately and automatically locate handset(s) of persons in distress and then communicate with them via voice or text message.

Peerless Capability

ARTEMIS provides a truly unique capability.
As is underlined by the innovation awards Smith Myers have received for the ARTEMIS capability.

ROYAL AERONAUTICAL SOCIETY
SILVER MEDAL WINNER

ICCA
INTERNATIONAL CRITICAL COMMUNICATIONS AWARDS
WINNER

SECURITY INNOVATION AWARD
ADS

beea
british engineering excellence awards
WINNER

Designed from a clean sheet of paper specifically for Search & Rescue

ARTEMIS is designed to automatically detect and locate cellular handsets at short, medium and long ranges depending on the hardware selected. With our highest power hardware, distances of greater than 30Km are regularly achieved.
The hardware packages comprise of proprietary Software Defined Radios (SDR) and Cellular Protocol Stacks designed and developed by Smith Myers and optimized for SAR taskings. Our SDR range of equipment comes in different form-factors for different operational environments, including two separate DO160(G) fully airborne qualified systems for manned aircraft and low SWAP packages for UAS and ROV systems.
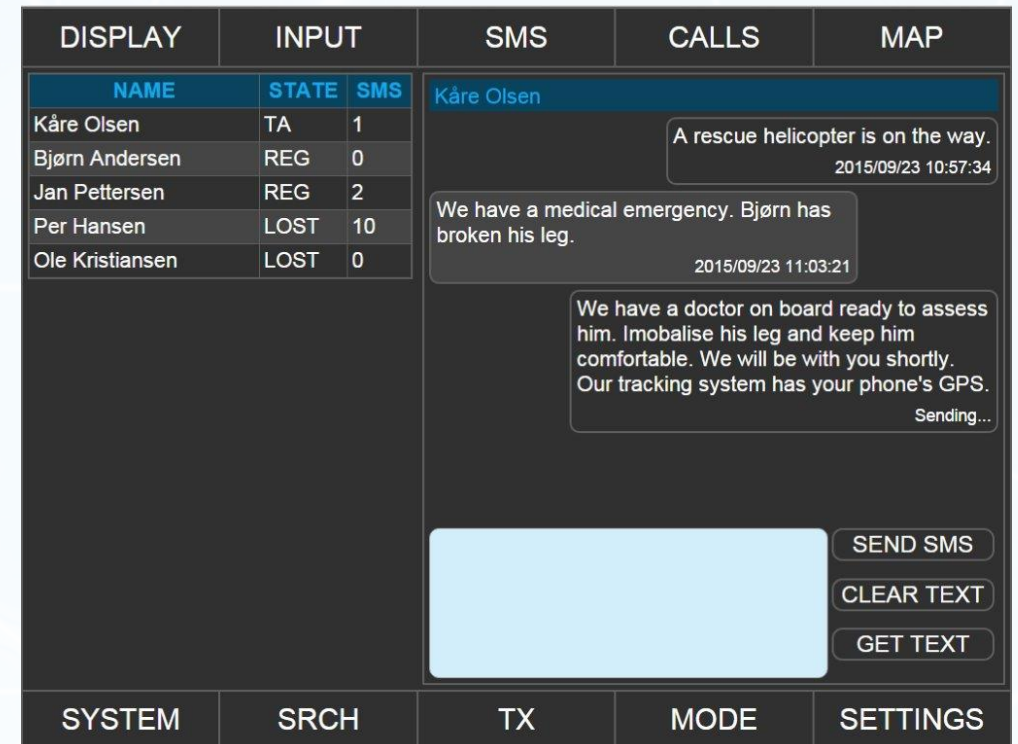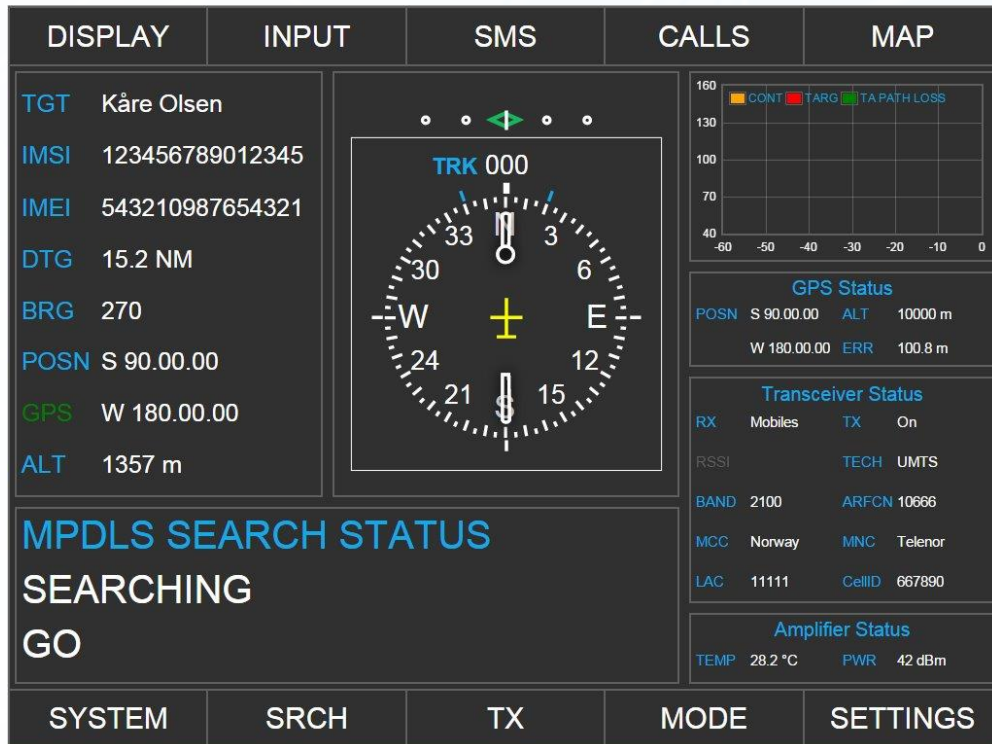
Smith Myers' auto triangulation algorithm and GPS geolocation techniques achieve impressive accuracy and by using two separate geolocation techniques simultaneously, redundancy is offered in situations where one technique may prove to be more accurate than the other.

It is also possible for the SAR Team to communicate directly with the handset(s) via SMS and/or voice communications via the simple and intuitive user interface.

ARTEMIS operates without the need for any specialised software on the handset itself. In effect, ARTEMIS looks for the handset and the handset looks for ARTEMIS. Using the system during a disaster situation such as large scale forest fires, ARTEMIS can also map and communicate with fire-fighting/SAR teams on the ground offering full situational awareness.

Simple and Automated

Our simple and intuitive user interface can be displayed on any screen that can host a web browser. Connection can be LAN or WIFI. The system can be stand alone accessing the supplied internal mapping, or using our standard API integrated with other systems (mission systems/avionics/cameras/radar) easily carried out by system integrators. For remote operations (UAV) the mapping can be run on the ground control system.

Multi-platform

Any number of ARTEMIS systems can be networked together to a central command centre for full situational awareness during disaster situations. Our Training, Software and Systems Integration team are used to supporting systems integrators for the installation, integration (such as automatically steering the EO/IR turret) and management of the ARTEMIS system on a range of different platforms, from manned aircraft to remotely operated ground vehicles. The addition of an ARTEMIS system offers greater utilisation of existing assets, and the possibility of successful missions in conditions of reduced visibility.

Concepts of Operations

Search & Rescue

ARTEMIS quickly locates the mobile phone of a person in distress. It can operate in local network coverage, or where there is poor or no coverage at all.
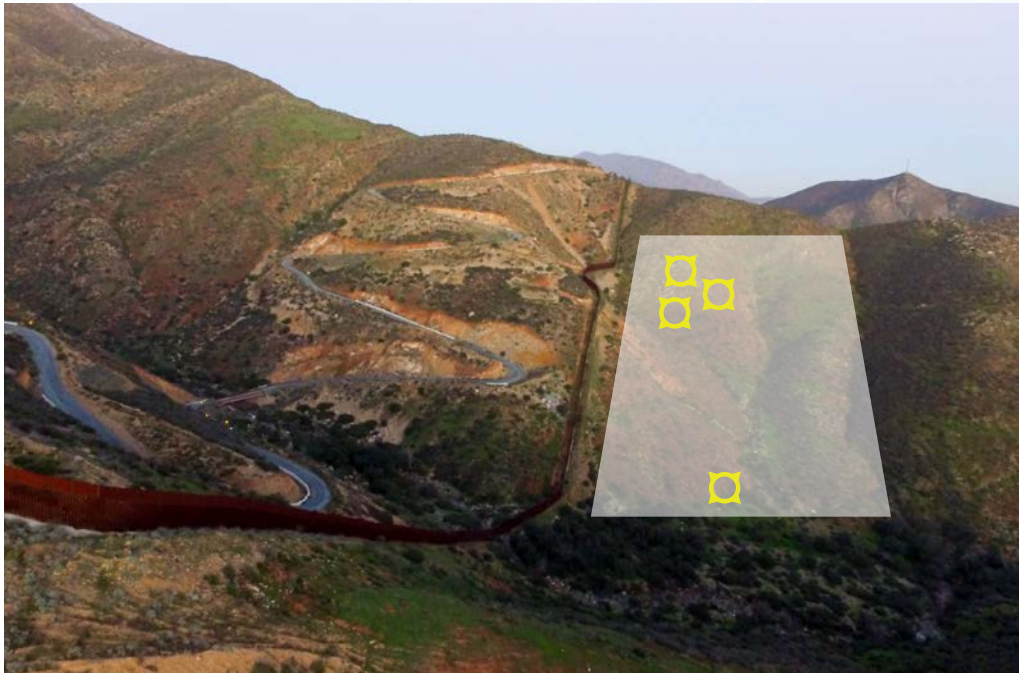

Natural Disasters

ARTEMIS can map and locate all mobile phones in a disaster area. The system can even send text messages to everyone in the area and receive text messages and/or calls from those in need of assistance.
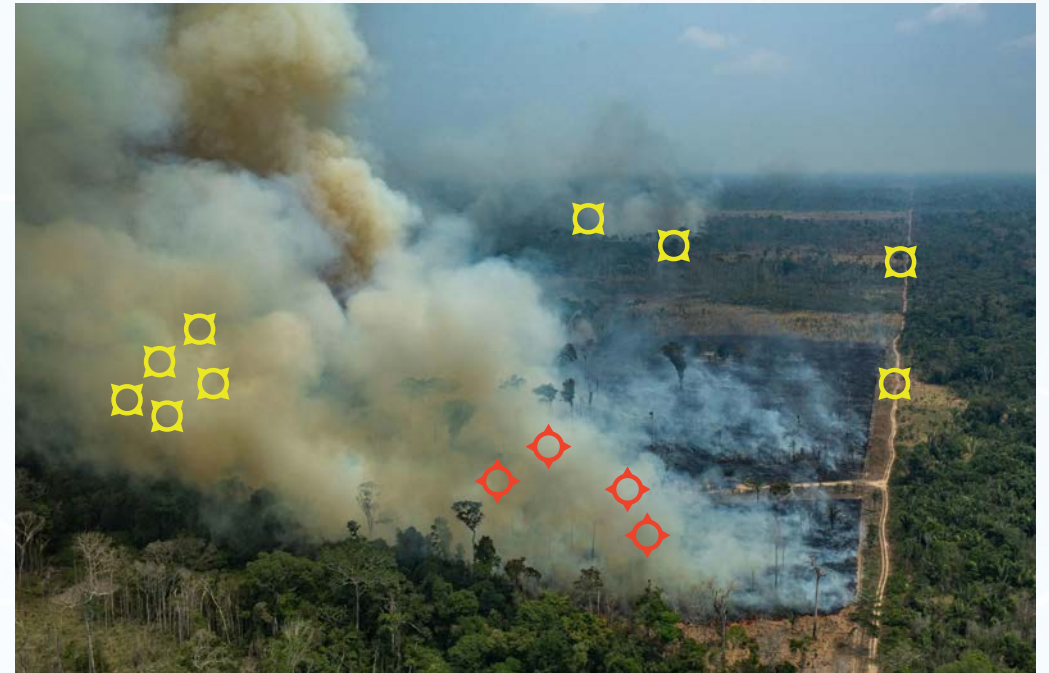
Border Security

In areas of particular focus draw a geofence to quickly identify and locate handsets in a specific area, ignoring handsets outside of the geofence. Used in areas with complex terrain, water channels, borders, natural disasters etc.

Situational Awareness

ARTEMIS can provide quick and accurate situational awareness in situations where traditional SAR sensors may struggle. Where SAR/Fire Fighting teams carry an ARTEMIS enabled cellphone, it will also be possible to map the location of the team and communicate with them from the ARTEMIS system.

ARTEMIS

ARTEMIS is in service now with numerous Coast Guard/Government Customers worldwide. For more information on the hardware/packaging options available please contact artemis@smithmyers.com requesting our Smith Myers Hardware Systems Brochure.

UK OFFICE:

Smith Myers
Omega Centre,
Stratton Business Park
Biggleswade
Beds, SG18 8QB

Tel: + 44 1767 601144
Fax: + 44 1767 601180
artemis@smithmyers.com
www.artemis.smithmyers.com

DISCLAIMER

The information contained in this datasheet is based on current development plans of Smith Myers Communications Ltd. Smith Myers Communications Ltd reserves the right to modify and change these specifications in the interests of continuous product development and improvement.

Further technical details are available to accredited Government Agencies upon request.