



Satellite Phones

# Field Solutions

## Connectivity From Remote Locations

Outside of cellphone coverage whether at a distant office or true field location, staying in contact with colleagues for both voice and email is no longer impossible. Older methods such as HF radios requiring large antennas and a plenty of power, have been replaced with small, portable satellite phones.

Choices depend on coverage, and connectivity needs with global, international and regional systems available :

- International dialling for voice
- Paging
- Text messaging
- Internet dial-up & WAP, Email access
- Data up to 19200bps



Mini M Terminal

## High Speed Remote Connectivity

In most cases where a high speed data link is required by the users at a permanent location, a VSAT or local terrestrial link is deployed. For some specialist users however a transportable high speed link is needed on demand. Typically these uses are media organisations, emergency aid providers, or those involved in heavy field data processing such as oil companies.

This type of coverage is available as dial-up in many parts of the world and offers :

- International dialling for voice
- Paging & Text messaging
- Internet dial-up & WAP, Email access, VPN capabilities
- Data up to 144Kbps



VSAT Terminal

## Data Collection & Management

Many data gathering operations have functioned with pencil and paper even for large data volumes. PDA's are now produced with :

- screens optimised for use in strong sunlight,
- large batteries
- in many cases integration to other key equipment such as GPS, for mapping applications



Personal Digital Assistant (PDA)

When accessing database information, SMART cards and readers can be used and/or integrated with the PDA, to capture data never before possible when checking databases :

- photo identity checks
- checking of data which may have been gathered from other data stations
- direct data entry to check for data errors or anomalies

# Field Connectivity & Data Collection Solutions

## CONNECTIVITY CHOICES

Users and organisations are advised to contact us before selecting a remote connectivity product, to ensure that the device and service has all the features needed for both the immediate application and has flexibility for future needs.

Key decisions include : portability vs. battery life, vehicle mounting, additional features for personnel tracking and safety solutions.

		FEATURES							
		Hand-held	Voice	Data Rate	GSM	Paging WAP SMS	Other	Africa (North of Zimbabwe)	Global
<b>MOBILE SOLUTION</b>	<b>Thuraya</b>	Y	Y	19.2K	Y	Y	-	Y	N
	<b>Globalstar</b>	Y	Y	9.6K	N	N	-	N	Outside Africa
	<b>Iridium</b>	Y	Y	2.4K	N	N	-	Y	Y
	<b>Mini M</b>	N	Y	2.4K	N	N	VPN	Y	Y
	<b>BGAN</b>	N	Y	144K	N	N	-	Y	N

## POWER

Field connectivity and communications devices are provided with as large a battery as is practical, but batteries do have a finite standby and operating time for each device.

Many users buy additional battery packs to extend their time in the field, and may be able to extend further using in-vehicle chargers when travelling between locations.

Ultimately, users have the option of using a solar charger with either their main battery pack, or when alternating between main and spare to ensure that they always have power available for key data and communications requirements.



## RUGGEDISED SOLUTIONS



Ruggedised Laptop

Field data hardware is available in many formats and the communications equipment in particular, which requires a line of sight to the satellite is built with outdoor use as part of the specification.

Ordinary PDAs and laptops are also fit for use outdoors in a limited range of conditions, but for truly remote locations with harsher weather and operating requirements, ruggedised cases, screens and keys should be used.

Stand-alone- ruggedised equipment or integrated with other systems such as GPS is readily available and can be provide to fit user's applications and operating environments.