



Field Solutions

Connectivity From Remote Locations

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



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
- Competitive call costs
- Dual mode: GSM or Satellite networks
- Solar chargers for batteries
- GPS functionality

High Speed Remote Connectivity

In most cases where a high-speed data link is required, the user is at a permanent location and 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.



BGAN Terminal

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

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 consult with AfriConnect before selecting a remote connectivity product, to ensure that the device and service has all the features needed for both the immediate application needs and of possible is also future proof.

Choices would 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
MOBILE SOLUTION	Thuraya	Y	Y	19.2K	Y	Y	-	Y	N
	Globalstar	Y	Y	9.6K	N	N	-	N	Outside Africa
	Iridium	Y	Y	2.4K	N	N	-	Y	Y
	Mini M	N	Y	2.4K	N	N	VPN	Y	Y
	BGAN	N	Y	144K	N	N	-	Y	N

POWER

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

Many users buy spare 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. In particular, communications equipment that requires a line of sight to the satellite is built with outdoor use in reasonable conditions are part of the specification.

PDA's 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.

Ruggedised equipment that is either stand-alone or integrated with other systems (such as GPS) is readily available and can be provide to fit user's applications and operating environments.