



# Using uniHub™ over in Wireless Environment

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## 1 Overview

On-Go's revolutionary uniHub™ technology provides transparent communication and networking connectivity regardless of your underlying network technologies. uniHub™ technology lets any data device, such as fax machines, credit card terminal, ATM machines, meters, webcam, GPS, seamlessly transmit data over the wireless network (cellular, satellite) from anywhere in the world.

This means that you can make remote data collection, send/receive faxes, transactional data services in wireless environment similar to fixed line environment.

## 2 Product range

The uniHub solution is made up of the following:

**UCH250** – This is an interface unit located at the customer premises that provides Ethernet (RJ45), Serial (DB9), USB (host), Subscriber Loop Interface (RJ11) and a PCMCIA card slot for flexible device interface and intelligent application processing. UCH250 has works with INMARSAT BGAN, FLEETBROADBAND, SWIFT64, SWIFTBROADBAND, IRIDIUM, GLOBALSTAR, IDIRECT, VSATs, GPRS cellular.

**UCH100** – This is an interface unit located at the customer premises that provides Serial (DB9), and Subscriber Loop Interface (RJ11) flexible device interface and intelligent application processing. UCH100 has works with IRIDIUM, GLOBALSTAR, and some GPRS cellular.

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## 3 Typical users

- Mobile workers.
- Temporary Site Communications.
- Disaster Recovery, Emergency Responder.
- Maritime.
- Aviation.
- Energy Production and Distribution.
- Finance – ATM users, PoS transactions.

## 4 Key Features

uniHub takes advantage of the IP-based BGAN network, and efficiently optimizes bandwidth utilization to deliver cost savings and functionality to users. Some of the applications it supports are:

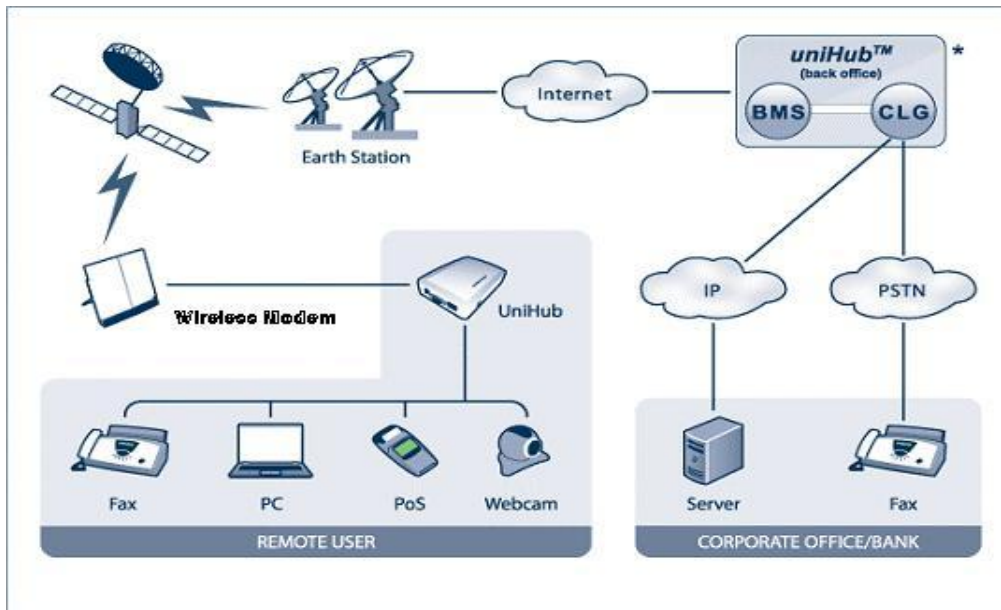
- Analog Data – supports devices such as credit card terminals, automatic teller machines and utility meters.
- Data Router – Provide router capability to local network. For example, provide LAN/WIFI to GPRS network routing allows multiple users to share the same cellular data connection.
- Webcam – Interfaces with off-the-shelf webcams to provide remote image capturing or video streaming.
- Store and forward fax service – If receiving fax is offline, the fax is stored at the back office and forwarded when the fax comes online, on a timeout the fax is converted to email and sent to an address of choice. Ideal for BGAN users constantly on the move.

## 5 Benefits to UCH250 users

uniHub offers you the following main benefits:

- **Cost Saving** – By managing data transmission efficiently and taking full advantage of packet networking, unihub can produce significant saving in airtime.
- **Ease-of-Use** - Provides a quick and easy way to connect any device to the BGAN network. Simply plug into the uniHub and set the desired communication method. This “appliance” approach provides the true plug-and-play benefit to users.
- **Flexibility** - Comes with five separate interface ports: serial port, Ethernet port (RJ45), USB port (host), modem port (to device) and PCMCIA card port. Any of these ports can be configured as the upstream network port; the remaining ports can be used for device hook-up.
- **Compatibility** - Built on standard and open technology. The uniHub solution bridges the gap between devices and any communication network or between two independent networks, permitting the sending and receiving of data.

## 6 Setting up

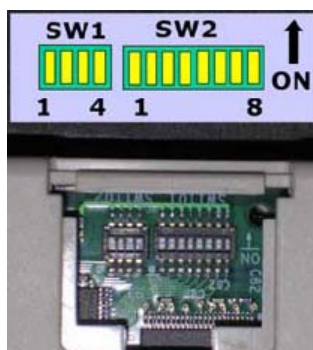


uniHub comes with several interface ports; the device simply need to be connected to the appropriate port and the uniHub configured using a web based interface.

You can connect devices via

- USB
- Ethernet
- PCMCIA
- Serial

You will need to configure the DIP switch on the side of the uniHub to use it with BGAN. The uniHub has a dedicated profile for BGAN. DIP switches are located on the bottom of the board that can be accessed without opening the enclosure. There are two group of switches, one has four (SW1) and the other has eight switches (SW2).



**POSITION 1:** USE DEFAULT CONFIGURATION (This is useful when the configuration is changed and user can no longer access the UCH web server); ignore the rest of SW2 setting

**POSITION 2:** USE STORED CONFIGURATION (This is useful when POSITION 3-8 are to be ignored)

**POSITION 3-8:** Use pre-built configuration.

Once the uniHub has been configured, it is simply a plug and play device. As there is no Graphical interface, the BGAN devices must be configured to obtain a data connection automatically.

## 7 Technical Summary

<b>Processor</b>	<b>180MHz ARM9 CPU</b>
Field Programmable Storage	8 MB FLASH
Storage	64 MB SDRAM
Display	Eight LEDs
Ethernet	RJ45 (10/100Mbps)
PCMCIA Slot	Standard (Type I, II card, 3.3 and 5V card)
Serial Port	DTE interface (DB9) (up to 115kbps)
Telephony Device Interface	RJ11 Central Office Emulation (Loop current, Ringer)
USB Host	USB spec 2.0 Full/Slow speed device (Type A connector)
Physical Dimension	17.5cm x 9cm x 3cm
Weight	0.5 lb
Power source	External 12V-28V DC power source, DC Adaptor - Switching power supply: Input - 105-220VAC, Output - 12VDC, (5.5mm OD, 2.1mm ID, DC Tip)
Environmental	Storage Temperature -50C to 80C Storage Humidity +40C, 95% Operating Temperature 50-95° F Operating Humidity 20-80% (w/o condensation)

## 8 Further details and support

### On-Go Contact

On-Go, Inc.  
10807 Burbank Drive, Potomac, Maryland 20854  
Tel: +1.301.765.8030  
Fax: +1.301.765.8031

[sales@on-go.com](mailto:sales@on-go.com)

[www.on-go.com](http://www.on-go.com)