Certification Exhibit

FCC ID: W6E-HS-100101

FCC Rule Part: Part 90, DA-02-545

ACS Report Number: 09-0058 - LD

Manufacturer: HySky Communications
Model: AD20-100101

Manual

Intelligent Transceiver Unit (ITU)

Quick Start Guide

DC10-100101 Rev 4

AGENCY CERTIFICATIONS

FCC Certification

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur
in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

<u>Warnings:</u>

1. Changes or modifications to this device not expressly approved by HySky Communications could void the user's authority to operate the equipment.

2. The ITU may only be used with antennas that have been tested and approved for use. Changes or modifications to supplied antenna(s) not expressly approved by HySky Communications could void the user's authority to operate the equipment. Contact HySky Communications for a list of approved equipment.

ZIGBEE OPTION

The ITU has the option of being supplied with a Zigbee transceiver module. This module is pre-certified by the manufacturer for FCC compliance. The FCC ID's for the two options are:

1. Zigbee low power option - FCC ID:OUR-XBEE2

2. Zigbee high power option - FCC ID: MCQ-XBEEPRO2

You will find the FCC ID of the Zigbee module (if so equipped) located at the top of the FCC Part 15 compliance sticker.

<u>Warning</u>

The Zigbee modules may only be used with antennas that have been tested and approved for use. Changes or modifications to supplied antenna(s) not expressly approved by HySky Communications could void the user's authority to operate the equipment. Contact HySky Communications for a list of approved equipment.

Getting Started

The HySky Intelligent Transceiver Unit (ITU) is a sophisticated two-way communication device that is designed to be easily setup and simple to operate. This guide provides step-by-step instructions for the initial setup. This one-time operation only needs to be performed when the unit is first installed at a new site.

Parts List

Ensure that you have all the required parts listed below before installation begins:

Intelligent Transceiver Unit (1)
DC Power Cable (1)
GPS Antenna/Cable (1)
RF Antenna/Cable (1)
RF Antenna Mounting Bracket (1)
Installation Software (ITUCharacterization.exe)

In addition to the parts supplied, you will need a PC with Windows XP (or later) and a standard serial cable (9-pin).

Installation and Configuration

Install the ITU, antennas, and power supply at the site as needed. Ensure access to the serial port connection on the ITU is available when installed. Once installed, follow the steps below:

1. Connect the GPS antenna cable
2. Connect RF Antenna cable
3. Connect the Power Cable (power needs to be provided before the next step)
4. Connect the Serial Cable attached to the PC
5. Run the ITU Characterization application on the PC (see Configuration section below)
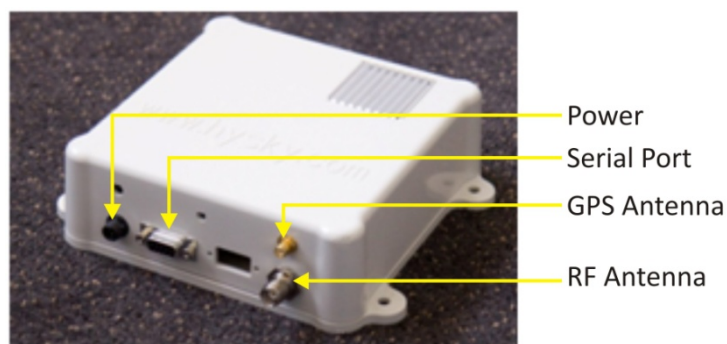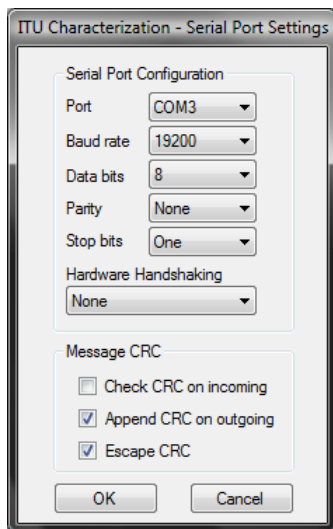

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Figure 1 – Connection Ports

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Configuration

Configuration of the ITU optimization the performance of the unit and needs to be performed once whenever the unit is moved to a new location. The following steps will complete the installation process and will allow the ITU to operate on the HySky network:
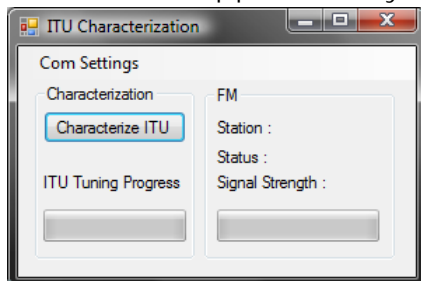
1. Configure the serial port
   Click the "Com Settings" button and select COM port that is connected to the serial cable. All other setting should be configured as displayed below. Once set, click OK.

2. Characterize the ITU
   Click on the "Characterize ITU" button and wait for the ITU Tuning to complete. During characterization you will hear the ITU chattering. This behavior is normal and will take approximately one minute to complete.

3. FM Lock
   When the characterization is complete, the FM Station section will start scanning for the best HySky station available. Once found, the Status field will change to "Locked" and the ITU will begin normal operation.

At this point, installation and configuration are complete. Disconnect the PC serial cable and connect the device to be monitored. This operation only needs to be performed once per site installation.

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