

## **NIGHTHAWK**

### **Installation Instructions**

**For the**

**Model: MeshERT 006**

**FCC ID: YJC-MESHERT006**

**Single Board Radio Module**

#### **Notice:**

- **This equipment complies with Part 15 of the FCC rules. Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.**
- **This device complies with Part 15 of the FCC rules subject to the following two conditions:**
  - 1) This device may not cause harmful interference**
  - 2) This device must accept all interference received, including interference that may cause undesired operation.**

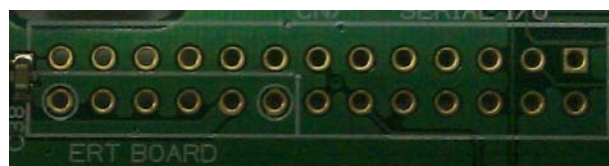
**This device must not be co-located or operating in conjunction with any other antenna or transmitter in its final installation**

#### **Limited Module Operational Description**

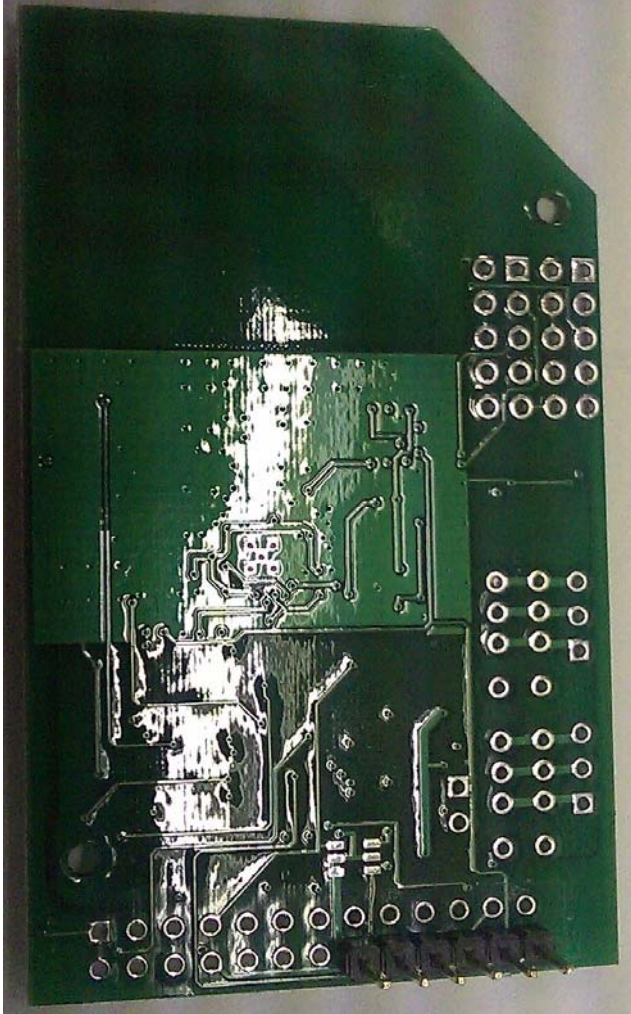
The Nighthawk Model MeshERT 006 Module is designed to provide supplemental drive by read capabilities to the standard Nighthawk RDM-950 cell technology based electric meters, the CEO-950 cell technology based disconnect collars for electric meters, and to serve as a data collector, radio repeater, and load control end point radio. It consists of a conformal coated single PCB with an integrated PCB antenna. It is designed to be powered through a connection to a Host board. The Host board provides and receives data from the Host board, but controls all radio functions and communications autonomously.

To Install the MeshERT 006 Module in Nighthawk devices:

- 1) Locate the host board expansion header on the Nighthawk product board that the MeshERT 006 Module is being installed on. The expansion header will be a 2 X 13 (26 pin berg style header) The Host board expansion header on all Nighthawk products looks like this:**

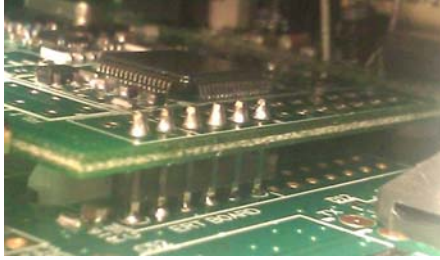


- 2) The Connector on the MeshERT 006 Module is a six pin male berg connector mounted on the bottom edge of the board. It looks like this:



The MeshERT 006 Module is installed on the host board on the side that the expansion header has the label “ERT BOARD” in the bottom left. The MeshERT 006 Module is positioned so that the six pins on the bottom of the module line up with the blocked area of the host expansion connector.

- 3) The joined assembly will look like this:



The MeshERT 006 Module is supplied the following from the Nighthawk Host board:

- 1)** Power - filtered and regulated 3.3 volt DC up to 250 milliamps. Ground for the module is shared with the Host board.
- 2)** Serial communications is provided and controlled by the Host board and is typically 19200 baud half duplex TTL level signals.
- 3)** Data and select lines are supplied at a 3.3 VDC level

All operational commands to the MeshERT 006 Module are handled by the host board firmware and is all automatic. There are no direct user commands used with the MeshERT 006 Module. The MeshERT 006 Module controls all of the radio functions and RF transmissions. The Host board has no control over the radio functions; it simply supplies the module with data from the meter assembly.

A label will be affixed to the Nighthawk product which states "Contains FCC ID: YJC-MESHERT006".

The MeshERT 006 board will only be installed in Nighthawk products and Nighthawk retains responsibility for compliance of the final product.