



Title **RDCERT User Information Manual**

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**APPROVALS**

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## 1 RDCERT OVERVIEW

The Nighthawk RDCERT is an electricity meter personality module that provides wireless capabilities to the host meter. This module includes three transmitters: an ERT radio, RF engine, and cell modem. The ERT radio is a 915 MHz band frequency-hopper which transmits a standard consumption message (SCM) that can be read by a utility's existing meter reading equipment. The RF engine is a 2.4 GHz transceiver module. The modem transmits metrology data over the cell phone network and receives commands such as remote connect/disconnect. Depending on customer needs the RDCERT can be delivered with any or all transmitters installed.

## 2 FCC COMPLIANCE STATEMENTS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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.

## 3 INSTALLATION AND MODIFICATION

This module must be installed to provide a minimum separation distance of 20 cm from all persons, and must not be co-located or operate in conjunction with any other antenna or transmitter. As this module will only be installed in Nighthawk products, Nighthawk retains responsibility for compliance of the final product.

**WARNING:** To ensure FCC compliance and system performance, this assembly shall not be changed or modified without the express written approval of Nighthawk. Any unauthorized modification will void the user's authority to operate the equipment.

## **4 ANTENNA**

The ERT antenna is a half-wave dipole antenna mounted on the inside of the meter housing, connected through a U.FL connector. The antenna has a designed maximum gain of 2.15 dBi.