

FCC Part 15.249 Certification
Test Report

FCC ID: SJS-380100HP

FCC Rule Part: 15.249

ACS Report Number: 04-0311-15C

Manufacturer: MARS Company
Equipment Type: Utility Meter Data Transmitter
Model: 100-HP

Installation and Operators Guide

MARS SmartRF Installation Guide

To ensure proper connection and resistance to water intrusion a waterproof butt splice is required to connect the SmartRF transmitter to the meter register. The recommended type of connector is a Scotchlok™ connector. This type of connector is ideal because it provides a good mechanical connection of the wires and a waterproofing gel that inhibits water ingress.

This device is designed to be installed in a meter pit at or below ground level. Professional installation by factory trained personnel is required for proper use and reliable communication.

Meter Connection Table

Manufacturer	Radio Red	Radio Green	Radio Black
Sensus	Encoder R	Encoder G	Encoder B
Hersey	Encoder R	Encoder G	Encoder B
Neptune	Encoder B	Encoder R	Encoder G
Amco	Encoder G	Encoder R	Encoder B
Severn Trent	Terminal 1	Terminal 3	Terminal 5

Installation Steps

1. Refer to the table above for wiring color codes.
2. While holding the Scotchlok™ connector with the button facing down, insert un-stripped wires fully into connector.
3. Once seated, use a crimper and firmly squeeze the connector until you hear a snap and gel seeps out of the end of the connector.
4. Repeat steps 1-3 for the other two pairs of wires and test to ensure the SmartRF is transmitting properly.

Information to the User

FCC Class B:

“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.”

Warning: Changes or modifications to this device not expressly approved by MARS Company could void the user's authority to operate the equipment.

RF Exposure

In accordance with FCC requirements of human exposure to radiofrequency fields, the radiating element shall be installed such that a minimum separation distance of 20cm is maintained between it and the user or general population.

Industry Canada

All Equipment:

This Class [*] digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations. 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.

Cet appareillage numérique de la classe [*] répond à toutes les exigences de l'interférence canadienne causant des règlements d'équipement. L'opération est sujette aux deux conditions suivantes: (1) ce dispositif peut ne pas causer l'interférence nocive, et (2) ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qui peut causer l'opération peu désirée.