February 27, 2012

Re: Modular Transmitter Approval FCC ID: ZH6-VRCOMM-HP IC: 9686A-VRCOMMHP

To Whom it May Concern:

The following information is being provided per the requirements of 15.212 regarding a limited modular approval of Part 15 devices:

This transceiver is a complete RF module with an integral reference oscillator.

External connections are provided for power and data communication.

The following numbered items correspond to similarly numbered paragraphs in 15.212. Each item is a response to the requirements of that document.

- 1. The module has integral RF shielding to isolate it from surrounding equipment and the larger environment in general.
- 2. All inputs are processed as data by the on-board microcontroller. The outside user has no direct control of transmit modulation.
- 3. In the transceiver, there is a 1.8V voltage regulator that powers the radio circuits other than the power amplifier. The microcontroller monitors the power supply voltage on a continuous basis. Should the Vpa found to be greater than the specified maximum of 4.25 volts, the unit will refuse to transmit. The minimum operating voltage is declared as 3.0 volts for Vpa and 2.0 for Vcc.
- 4. A LSR Model 001-0002 is 900MHz Dipole with Reverse Polarity SMA connector, a custom designed bowtie-PCB trace antenna with a Reverse Polarity SMA Connector, a 6dBi Dipole from L-Com Model HGV-906 and a 12.35dBi Yagi from Comtelco Model Y3387-915 was used for certification of this module. This is in accordance with Part 15.203.
- 5. The module was tested in a stand-alone configuration and found to be compliant with Part 15 regulations.
- 6. An FCC ID label is affixed to each unit at the time of manufacture. Information is also clearly presented in the user guide about labeling requirements for the final assembly.
- 7. This unit is compliant with Part 15.247. Installation and other requirements are presented in the user guide to allow the unit to be correctly installed.
- 8. The unit is compliant with the RF exposure requirements of Parts 15.247 and 2.1091.

Further information may be obtained from Nelson Irrigation.

Sincerely,

Craig B. Nelson Vice President

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innovation in irrigation™

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