

Modular Transceiver Compliance Statement

Model: VSUB075(REV-A1)

FCC ID: PII-VSUB075-1

1. RF Shielding

The RF Daughter Board 900 MHz FHSS transceiver, VSUB075(REV-A1), is produced with an RF shield soldered onto the board. The PCB is 4 layers. All components are on one the top side which is layer 1. The second Layer is a ground plane. Layer 3 is a routing layer and the bottom layer is another ground plane. The RF shield encloses the entire transmitter (VCO, Power Amplifier, T/R switch). The shield also encloses the receiver front-end (LNA, Mixer). **The module does not rely on the host system in which it is installed to provide shielding.**

2. Data I/O

The data input and output pins run directly into the onboard microprocessor. The processor controls transmitter on/off time and modulation. This ensures that the transmitter spectrum remains independent of the I/O pins.

3. Power Supply

The module operates from an input of 8-12V DC source. All circuitry critical to determining RF frequency or RF output power levels operate from an internally regulated 5V DC source.

4. Antenna

The module was tested with the following antennas:

Manufacturer	Model #	Type	Gain(dBi)	Minimum Cable Length
Vantage Controls	VDA-0059	Monopole Whip	2	N/A
Vantage Controls	VDA-0055	Monopole Whip	2	N/A
Astron Wireless	PCD09A0V	Dipole	2.1	13 feet
Astron Wireless	AXH9RTSMS	Half-Wave	2	N/A
Astron Wireless	AXH9RTSMA	Half-Wave	2	N/A
Astron Wireless	AXH9RTSM	Half-Wave	2	N/A
Astron Wireless	AXH92RTSMS	Half-Wave	2	N/A
Astron Wireless	AXH92RTSMA	Half-Wave	2	N/A
Astron Wireless	AXH92RTSM	Half-Wave	2	N/A

All of these antennas use either a reverse-thread SMA connector or permanent solder connection to satisfy the requirement of section 15.203.

5. Testing

The module was tested as a stand-alone device utilizing its own shielding and filtering to achieve compliance.

6. Labeling

The module contains the required FCC label (See Test Report) located on the shield. In cases where the module is installed inside another product, an additional label containing the following wording is placed on the outside of the final product:

This device contains Transceiver Module FCC ID: PII-VSUB075-1

7. RF Exposure

Refer to the document "RF Exposure/Environmental Evaluation".

8. Product Integration

This modular transmitter has been developed for internal use by Vantage Controls. Vantage Controls has complete control of the end products that it will be used in and can guarantee that all labeling and warning statements follow the guidelines listed above.