



## **VTech Group of Companies**

### **Module Compliance for the 900MHz Half-Duplex Transceiver M90SXCRN2**

#### **1. Shielding**

The 900 MHz transceiver, M90SXCRN2, is supplied to the user as a fully shielded module. All components are located on one side of a 3" x 1 15/16" circuit card. The backside of the circuit card is an unbroken copper plane connected to the system ground. The shield is seam soldered around its entire perimeter to the ground plane. The only components not contained within the shield are the RF output connector and the user interface (10-pin header). All connections to the user header pass through an EMI filter comprised of a ferrite bead and a bypass capacitor.

#### **2. User I/O**

Each pin of the 10-pin header, other than 5.0 Volt DC power and ground, pass through a buffer, or level translator. Overdriving or under driving any of the data inputs has no effect on the amount of RF power, modulation spectrum, or operating frequency of the transceiver.

#### **3. Power Supply**

The module operates from a nominal 5.0  $\pm$ 5% Volt source. All circuitry critical to determining RF frequency or RF output power levels, operate from an internally regulated 3.3 Volt source. The module contains an under voltage/brownout reset circuit that fully disables the RF transmitter for input voltages of 4.8 volts or less.

#### **4. Antenna**

The module was tested with a whip antenna. The antenna was connected to the module using an MMCX coaxial connector. This miniature coaxial connector satisfies the requirements as a "unique" connector.

#### **5. Testing**

The module was tested in a stand-alone configuration (See Test Report). The serial port of a notebook computer was used as a data source for the module during testing.

#### **6. Labeling**

The shield of the module contains the required FCC label (See Test Report). In cases where the module is installed within a customer's device, an additional label containing the following wording will be provided:

**This device contains Transceiver Module FCC ID NRL90SXCRN2**

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**VTech Wireless, Inc.**