FCC ID: M5ZVM1

Operational description of the Wireless Vibration Sensor, Model Point Sensor Vibration

Description of the circuit functions, ground system and antenna of the Point Six, Point Sensor Vibration Wireless transmitter

The Point Sensor wireless vibration data transmitter is a lithium battery operated, microprocessor based, 418 MHz. transmitter that transmits both analog data and a unique 64-bit serial number. The microprocessor is brought up from a power down state every 1 second by a DS2417 time of day clock interrupt output. Analog data are taken from a 12-bit ADC and the sensor used is a piezo film sensor (MFR. Measurement Specialties , Part # LDT0-028K/L). The microprocessor counts the 1-second interrupt cycles from the DS2417 clock until the transmit period has expired. The microprocessor then reads the analog value from the ADC, combines it with the serial number and transmits the entire data packet serially with a Linx Technologies TXM-418-LC-R 418 MHz. Transmitter module. The microprocessor then powers down into a quiescent state to wait for the next interrupt from the DS2417 clock.

The PC board bottom layer is a ground plane and the antenna is a 1/4-wave loop that has been etched in PC board material and placed into the ABS cover. The entire electronics is coated with conformal coating to protect it from condensation.