Applicant：Dongguan Southstar Electronics Limited
FCC ID：X8CEPOOL

Operation Description

The transmitter is a universal SDR RF transmitter chip AX5051. The T1 (AX5051) has an integrated RF frond end with modulator, communication controller and communicates the microcontroller via a SIP buss. U1(ATMEGA32U4-AU) is a High Performance, Low Power AVR 8-Bit Microcontroller used to interface with the radio frequency chip T1 on the SIP buss, read and report sensor voltage, then sensor voltage is buffered by U9 (MCP6234-E) a low power general purpose operation amplifier. The PH (Power of Hydrogen) and ORP (oxidation reduction potential) sensors are high impedance and thus must be buffered by U9 to produce accurate readings as the sensors work. The temperature sensor uses an NTC (Negative temperature coefficient) resistor to indicate the ambient temperature of the transmitter unit. Finally, all information delivered to the air by antenna.

Antenna is formed by two copper wire configured in a dipole. Common grounding on PCB is not connected to real external ground. Power supply is DC 6V by four “AA” batteries.