

RaCON-3 Description

1. Specifications

- **Frequency coverage**
72.010~72.990(MHz);
- **Type of emission**
Frequency Modulation;
- **Radio Frequency Power**
20DBm;
- **Current drain**
DC12V 300mA;
- **Signal Pulse width**
0.5~2.0ms;

2. Circuit Operation Description

The RaCON-3 3-channel radio system circuit is shown as Figure-1.

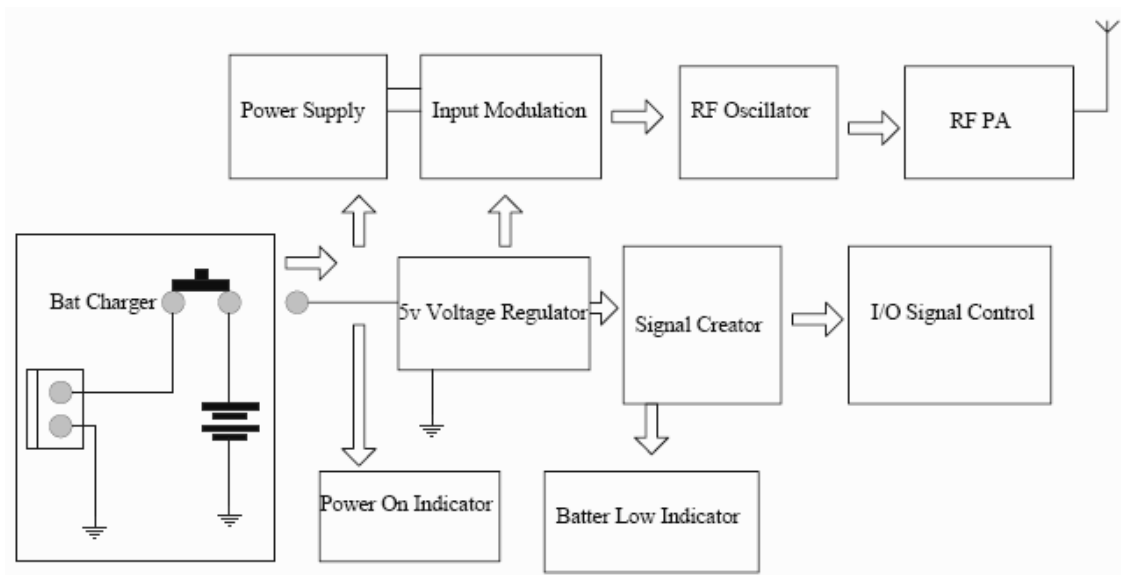


Figure-1

This circuit is consisted of the following parts:

- Battery and Power supplier;
- I/O controller;
- Proportional-Control pulse signal Creator;
- FM signal Modulator;
- Radio frequency(RF) power amplifier;
- Antenna.

The microprocessor-based controller receives the operator's instructions, and generates proportional-control pulse signal. The signal is modulated in FM mode by the voltage-control quartz oscillator, and then transmitted to three grade transformer-coupled amplifier circuits and sent to the aerospace.