

Transceiver Operation

General

The TT-120 is a complete transceiver module operating in the 900 Mhz ISM band (904-926 Mhz). The module has onboard digital and analog I/O allowing multiple configurations for many different applications. The unit can relay information over distances of 300' with a total turn around response time of 25 milli seconds. Each packet of information is coded with multiple security checks ensuring safe, reliable message reception. The unit itself operates in a half duplex mode. Multiple units may be used in the same area without interference. Each unit is configured by dipswitches. The dipswitches allow the user to select multiple application settings.

I/O Description (refer to Schematic dwg#98565158)

The TT-120 has a total of (18) TTL digital inputs. These inputs are driven by (4) different drivelines (inputs are monitored 50 times/second). The TT-120 also has (4) digital encoder inputs and (1) analog input (for 10K potentiometer). The unit provides a separate dry contact input for an on/off switch.

The TT-120 provides (2) LED outputs.

An external charger may also be used. A separate connector (J6) is provided for this connection.

The TT-120 also provides a hard-wired backup communication option. The umbilical option is powered by 12VDC. The umbilical option is commonly used in areas where RF is not permitted.

Power Supply Requirements

The unit accepts a DC supply from 5.5 – 12VDC. Total current consumption is approx. 20-25 mA.