

RFID Wireless Location Modules Data Sheet



Wireless Location Module Info

Base station transceiver, configurable to receive transmissions from personnel tags within 1 – 50 metres “the read zone”. Module transmits its own ID and all the tag ID’s within the read zone.

Electrical Power

- Power Supply 5v .2 Amp
- Average current consumption in use typically 76µA
- Current consumption not in use is typically less than 1µA

Transceiver RF Specifications – 868.95MHz, 915,MHz, 867. MHz

- Operating Frequency 868.95 MHz (wireless exempt band)#
- Transmission Range up to 100 metres
- Integral loop antenna matched to a narrow band SAW filter
- Transmit Range*, typically 50 metres line of sight
- Low ageing frequency reference, <1ppm per annum
- Modulation, Manchester coded FSK at +/- 38.4kHz deviation
 - Manchester data rate 20.945kbps
- Wireless Location Module transmits at .7 Ms seconds intervals
- RF output typically -26 dBm (26 micro watts) e.i.r.p.
- Spurious radiation below 1GHz less than 4nW
- Spurious radiation above 1GHz less than 1µW
- 16 bit CRC for extremely highly data integrity
- Tag receive range, average set at around 0.6m
- Receiver operates on a 10.5 second duty cycle
- Conforms to ETSI EN300-220-2.1.1.

#alternative frequencies available

Environmental

- Operational temperature -60 °C to +85° C;
- Storage temperature -60°C to +70°C;
- Humidity 5% to 99% (non-condensing).

RF Specifications – 868.95MHz, 867.90MHz, 915.15MHz

- Range, RSSI adjustable from 1m to 50 m line of sight;
- Operating frequency 868, 867.90 & 915.15/915.30 MHz;
- Low ageing frequency reference, <1ppm per annum;
- Noise figure 1.5dB;
- Input SAW filter 1200 kHz 3dB bandwidth;
- IF filter bandwidth 110kHz, double filtered;
- Demodulation. FSK optimised for +/- 40 kHz deviation;
- Channel spacing 100kHz;
- Excellent blocking and adjacent Channel rejection;
- Antenna socket SMA 50 Ohm;
- RF input return loss 11.2 dB;
- Sensitivity >=-105 dBm;
- Max RF Input +20 dBm.

Features

- Site pre-configured for easy installation;
- Fully network command configurable for easy setup; [SEP]
- Quick reporting of alarms to network; [SEP]
- Radio protocol uses 16 bit CRC for extremely high data integrity ;
- Compatible with active RFID personnel and assets/badges/tags;

Dimensions

- Diameter: **100mm D25mm**
- Provided in different forms to fit

