

Technical Description

This is a modular transmitter used in a variety of Guardian Instrument products. The *Data Radio* is designed to operate with either of two frequencies, 916.5MHz or 914.0MHz at data transmission rates of 12-19200 baud. Guardian manufactures a line of construction equipment instrumentation. This Guardian-manufactured instrumentation consists of but is not limited to:

- Model 420 Display
- Radio Tension Link
- Radio Boom Angle Sensor
- Radio Anti-2-Block Switch

The heart of this device is either the RFM TR1000 Hybrid Transmitter designed for 916.5MHz operation or the TR1004 designed for 914.0MHz operation. The Data Radio can come supplied with either module. It is designed for modulation types on-off keyed (OOK) and amplitude-shift keyed (ASK) modulation. The modules maximum output power is 0.75mW. They are designed specifically for compliance to CFR47, Part 15.249.