



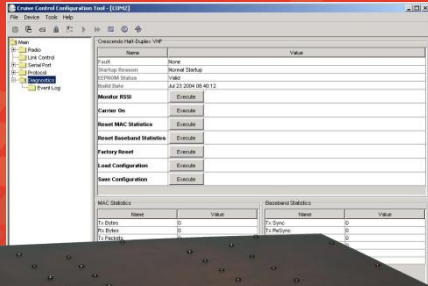
RFInnovations

Leaders in Wireless Data

250 Watt VHF Paging Transmitter

The RFI-148 250 is a high performance paging transmitter with true DDS frequency generation that enables precise control and flexibility for a wide range of data transmission applications.

The transmitter is particularly suitable for large simulcast POCSAG, ERMES and FLEX paging networks



Features

- High power output (selectable from 20 W - 250 W)
- SNMP diagnostics and alarms
- Full VHF Band coverage (138-174MHz)
- DSP precision modulation
- Integrated isolator
- Sniffer port for in-rack receiver
- Remote firmware upgrade capability
- Software selectable frequency offset
- Adjustable absolute delay correction
- Front panel indicators for power output and diagnostics
- Hardware alarm outputs
- High frequency stability and external reference option

Applications

The RFI-148 250 is suited for applications in city and state wide paging systems for commercial, health and emergency services usage where reliable simulcast overlapped coverage is critical.

The transmitter can be used as a standalone unit for covering a campus or building, or as a part of a large wide area network with almost any paging terminal vendor.

The transmitter can also be seamlessly installed in place of other transmitter brands in an existing VHF paging network.

RFInnovations

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Specifications

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| Multiple Paging Protocols | The transmitter can be used with the industry standard paging formats POCSAG (4 level FSK 1200/2400; 2 level FSK 512/1200), ERMES and FLEX (4 level FSK 3200/6400; 2 level FSK 1600/3200) |
| Output Sniffer Port | A separate sniffer port with output power relative to the transmitter output allows a diagnostics module to check the outgoing RF message for integrity and transmit power level |
| Absolute Delay Correction | The transmitter absolute delay setting can be configured for multisite networks to account for different upstream paths from the paging terminal to the transmitter sites |
| Frequency Offset | Configurable frequency offset allows for multi-site frequency planning to eliminate 'zero beating' and RF nulls |
| Remote Diagnostics & Firmware Upgrade | Configuration and diagnostics software allows remote connection to the transmitter sites for the purpose of diagnostics and network fault finding |
| Integrated Isolator | Integrated isolator allows for VSWR measurement after the isolator for antenna performance and operation in congested RF environments |
| Reliability | Superb environmental control, improved amplifier efficiency and a design optimised for reliability makes the RFI-148-250 one of the most reliable high-powered paging transmitters available |

PHYSICAL

Dimensions: 19" Rack mount, 4RU high.
480 mm x 395 mm x 177 mm
Weight: 14kg
Construction: Welded and passivated mild steel, aluminium powder coated front panel

GENERAL

Operating Voltage:
AC: 85 VAC to 132 VAC or 170 VAC to 264 VAC autoselect. 47 Hz to 400 Hz
DC: +20 VDC to +31.2 VDC
Operating Current:
- Transmit 250W 18.0 A @24VDC
- Transmit 150W 11.5 A @24VDC
- Transmit 100W 8.0 A @24VDC
- Transmit 25W 6.5 A @24VDC
- Standby 400mA @24 VDC
Operating Temp: -5 to +55°C
Operating Humidity: Up to 93% non-condensing relative humidity

TRANSMITTER

Frequency Range: 138 MHz to 174 MHz
Duty Cycle: Up to 100%
Transmit Power: 20 W to 250 W software selectable in 1 W steps.
Channel Bandwidth: 25 kHz
Frequency Raster: 10 kHz, 6.25 kHz
Frequency Stability: 1ppm standard (external reference input available)
Compliance: AS/NZS 4769.1 2000, AS-4295:1995; ETSI EN 300 113; ETSI EN 301 487; EN 60750; RoHS (planned)

DATA SYSTEM

Data Interface: Asynchronous POCSAG, Synchronous ERMES / FLEX
Modulation:
POCSAG: 512 / 1200 / 2400 (2-FSK)
ERMES: 6250bps (4-FSK)
FLEX: 1600 / 3200 / 6400 (2/4 - FSK)

SIMULCAST SUPPORT

Frequency Reference: Internal (TCXO) or external (GPS) with automatic switch-over
Carrier Offset: Up to 3000 Hz (1 Hz steps)
Absolute Delay: 0 to 40ms (1 us steps)

DIAGNOSTICS

Windows™ management application for local configuration and diagnostics. Remote diagnostics via SNMP

PRELIMINARY SPECIFICATIONS v1.2

