RFInnovations

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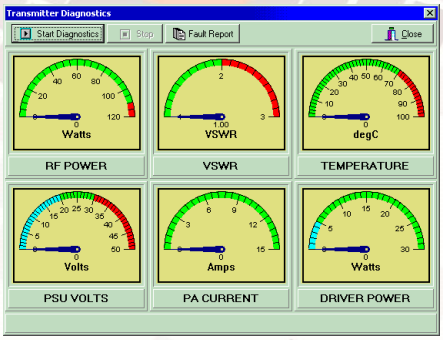
an STI Engineering product

# 100 Watt VHF Paging Transmitter

The RFI-148 100 is a high performance paging transmitter with true digital DPS 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

- Built in diagnostics
- Full VHF Band coverage
- DSP precision modulation
- 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-148 100 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 stand alone 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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# Specifications

| | |
|---|---|
| **Multiple Paging Protocols** | The transmitter can be used with the industry standard paging formats POCSAG, ERMES and FLEX |
| **Legacy Support** | The transmitter has many connection options to suit current and legacy terminal systems. |
| **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** | Configuration and diagnostics software allows remote connection to the transmitter sites for the purpose of diagnostics and network fault finding |

PHYSICAL
**Dimensions:** 19" Rack mount, 4RU high, 395mm deep
**Weight:** 18kg
**Construction:** Welded and passivated mild steel, aluminium powder coated front panel

GENERAL
**Operating Voltage:**
**AC:** 85 to 132 VAC or 170 to 264 VAC autoselect. 47 to 400Hz
**DC:** +20 to +30 VDC
**Operating Current:**

| | |
|---|---|
| - Transmit 100W | 12 A @24VDC |
| - Transmit 75W | 11.5 A @24VDC |
| - Transmit 50W | 7.8 A @24VDC |
| - Transmit 25W | 5.1 A @24VDC |
| - Standby | 400mA @24 VDC |

**Operating Temp:** -10 to + 60°C
**Operating Humidity:** Up to 90% non-condensing relative humidity

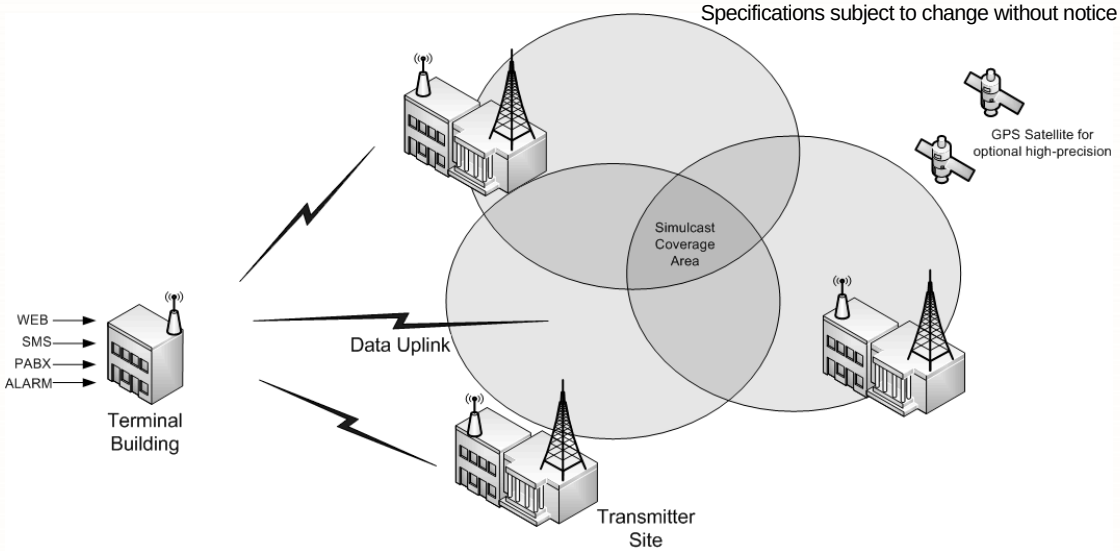
TRANSMITTER
**Frequency Range:** 138 MHz to 174 MHz
**Duty Cycle:** Up to 100%
**Transmit Power:** 25 W to 100 W software selectable
**Channel Bandwidth:** 25 kHz
**Frequency Raster:** 10 kHz, 6.25 kHz
**Frequency Stability:** 1ppm standard (external reference input available)
**Compliance:** AS/NZS 4769.1 2000, AS-4295:1995

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 (5 us steps)

DIAGNOSTICS
Windows™ management applicationfor local configuration and diagnostics. Remote diagnostics via connection-based serial link

Specifications subject to change without notice V090911

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