RFInnovations

Leaders in Wireless Data

an STI Engineering product

250 Watt UHF Paging Transmitter

The RFI-900 250 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 and FLEX paging networks

Features

- High power output (selectable from 20 W - 250 W)
- SNMP diagnostics and alarms
- 929-932 MHz Band Coverage
- DSP precision modulation
- Integrated isolator
- Sniffer port for in-rack receiver
- Remote firmware upgrade capability
- 110-250 VAC, 24 VDC and -48 VDC versions available
- 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-900 250W 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 UHF paging network.

STI Engineering

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Specifications

Multiple Paging Protocols	The transmitter can be used with all industry standard POCSAG and FLEX paging formats.
Output Sniffer Port	A separate 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	Windows™ software allows remote Ethernet connection to the transmitter for configuration, diagnostics and firmware upgrade.
Smart Protection	Configurable alarm thresholds and transmitter actions allows user configurable levels of automatic protection for on-site equipment.
Integrated Isolator	Integrated fan cooled and temperature controlled isolator means a damaged or missing antenna system can be remotely diagnosed.
Reliability	Superb environmental control, improved amplifier efficiency and a design optimised for reliability makes the RFI-900 250 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: 12.5 kg – 14 kg (model specific)
Construction: Welded and passivated mild steel, aluminium powder coated front panel

GENERAL
Operating Voltage:
AC: 100 VAC to 250 VAC, 50 to 60 Hz
DC: +20 VDC to +31.2 VDC (24 VDC version)
-40.5 VDC to -57 VDC (-48 VDC version)
Operating Current:
- Transmit 250W 18.6 A @24 VDC
- Transmit 200W 16.4 A @24 VDC
- Transmit 150W 14.2 A @24 VDC
- Transmit 100W 11.8 A @24 VDC
- Transmit 25W 6.9 A @24 VDC
- Standby 400mA @24 VDC

Operating Temp: -30 to + 60°C
Operating Humidity: Up to 95% non-condensing relative humidity

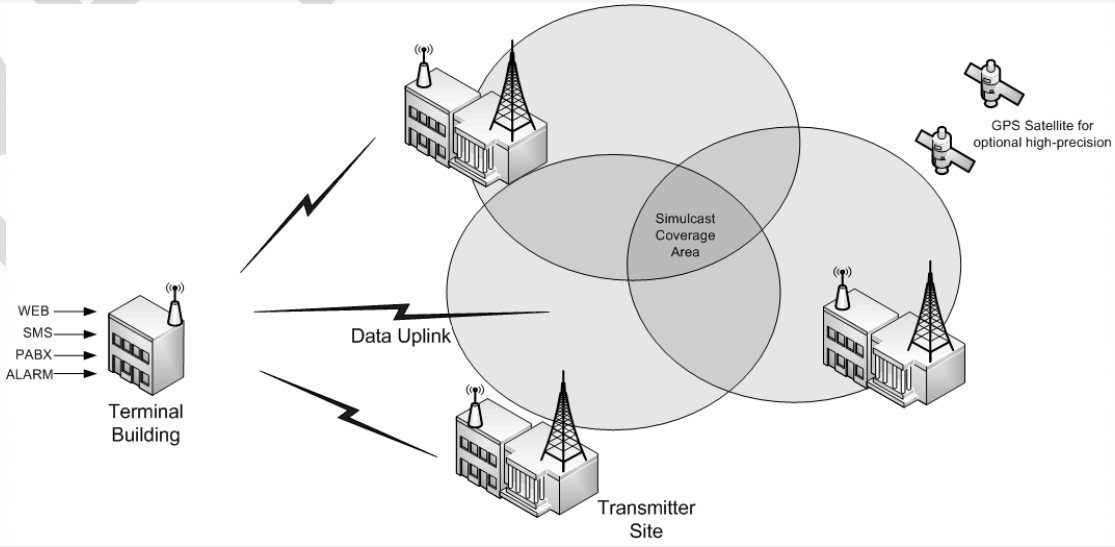
TRANSMITTER
Frequency Range: 929 MHz to 932 MHz
Duty Cycle: Up to 100%
Transmit Power: 20 W to 250 W software selectable in 1 W steps
Channel Bandwidth: 25 kHz, 20kHz, 12.5kHz
Frequency Raster: 25 kHz, 20 kHz, 12.5 kHz, 10 kHz, 6.25 kHz, 5 kHz
Frequency Stability: 1ppm standard (external reference input available)
Compliance: AS/NZS 4769.1 2000, AS-4295:1995; CFR 47 Part 15 and Part 90: ETSI EN 300 113 (scheduled); ETSI EN 301 487 (scheduled); EN 60750 (scheduled); RoHS (scheduled)

DATA SYSTEM
Data Interface: Asynchronous POCSAG, Synchronous ERMES / FLEX
Modulation:
POCSAG: 512 / 1200 / 2400 (2-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 5000 Hz (1 Hz steps)
Absolute Delay: 0 to 40ms (5 µs steps)

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

VERSION 0.1 PRELIMINARY – IN DEVELOPMENT



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