

## RPT503 UHF - PAGING TRANSMITTER



- Easy selectable power output from 1 to 5 watts
- Fully synthesized transmitter from 430MHz to 470MHz
- Up to 100 percent duty cycle
- Multiple code formats: Multitone Mk6, Mk7 and POCSAG
- Easy to install and configure using a standard PC or Laptop
- Small footprint

The new RPT503 UHF Series Transmitter has been designed specifically to interface with the Multitone paging systems. With up to 5 watts of output power and supporting master and slave line synchronization it meets the requirements of even the largest paging systems.

### Connected by a Single Twisted Pair

A single pair line cable is all that is required to connect the encoder to the transmitter. This allows local operation via a twisted cable pair, or remote operation via a PTT line. DTMF tones switch the transmitter into different modes, allowing both analogue and digital data and speech to share the same pair.

### Multiple Code Formats Supported

The RPT503 Series Transmitters can be used for Multitone analogue and digital formats, transmitting any analogue, digital or FM (Frequency Modulation) code formats. The RPT 503 transmitters are also able to transmit FSK (Frequency Shift Keyed) formats such as POCSAG (CCIR Radio Paging Code No. 1).

### Integral Line Synchronisation

The RPT503 Series Transmitter can be synchronised to other transmitters on the same frequency, without the requirement for a separate synchronization unit. The RPT 503 transmitters are linked via an audio-pair line and use low frequency tone signaling to synchronise the transmitter frequencies.

### Status Indication & Fault Monitoring

LED's provide visual indication of the transmitter status. These include; Tx keyed, power and fault. Internal fault conditions are also monitored, such as High Reverse Power and Oscillator Fail. Further features include a failsafe timer, to key down the transmitter automatically after 256 seconds and a phase locked local loop oscillator for consistent performance and reliability.

### Easier Installation & Support

Transmitter set-up is configured via a standard PC or Laptop, making the RPT503 UHF Transmitter easy to install and configure on-site. With a small footprint and extremely lightweight design this product is much easier to handle. Supplied with both mounting brackets and feet, it can be easily wall or desktop mounted.



### RPT503 UHF - PAGING TRANSMITTER

#### Radio Performance

Frequency Range  
Frequency Stability  
Output Power  
Duty Cycle  
Normal Load Impedance  
Channel Spacing

#### RPT 503 UHF (PLL Synthesized Radio)

430-470MHz  
+/- 2.5 ppm -20°C to +60°C  
Up to 5W  
Up to 100%  
50Ω  
12.5/20/25kHz

VSWR Protection

Protection against short-term removal of the antenna  
(maximum of 5 calls with the antenna disconnected)

Antenna Options

End-fed dipole or standalone UHF whip with 4m cable

#### Inputs

Line Input  
AC Mains Input  
DC Input 13.6V at 2.1A

-33 to -13dBm, 600Ω balanced line  
100 to 240V 50/60Hz (Separate Power Supply Unit)

#### Ancillary Connections

Line Input  
RF Output

8-Way RJ45 connector, -33 to 13dBm 600Ω balanced line  
50W N-type connector

Auxiliary Transmitter Control

15-Way High Density D-type connector  
-13dBm into 600Ω (speech and data)

Line Synchronisation

8-Way RJ45 connector  
-13dBm into 600Ω

Line Synchronisation Frequency

20kHz

#### Displays & Alarms

LED Indicators  
Alarm Outputs

Standby, transmitter keyed and transmitter failed  
Open collector logic fault indication

#### Environmental

Operating Temperature  
Storage Temperature

-20°C to +60°C  
-20°C to +70°C

#### Code Format

Multitone Mk6, Mk7 & POCSAG (CCIR No.1)

#### Dimensions

Length x Height x Depth  
Weight

168mm x 60mm x 104mm  
650 grams

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