Paging & Data Transmitter Modules

The ATX Series of transmitter modules are high quality, cost effective, synthesized, narrow band VHF, UHF & 900MHz products for mobile or base station operation in the paging & data markets. The products have been designed for mounting directly into a client's product with the minimum amount of fuss and number of connections.

RFDataTech



MOUNTING

Heat sinking is provided by the integral 5mm aluminium milled base which has 4 threaded mounting holes, but for prolonged transmission it should be bolted to a larger metal back plate to give additional heat sinking.

PERFORMANCE

The ATX transmitters meet the relevant requirements of USA FCC, Canadian IC and European EN 300-224, EN 300-086 & EN 300-113 when used with suitable external control circuitry and have a frequency stability of ± 1.5 ppm over the range -30degC to +60degC as standard, or ± 1 ppm as an optional enhancement.

CONTROL INTERFACE

The ATX is designed to interface with an external microprocessor for channel change, RF power level control & transmit enable, etc. Alternatively the RF power can be adjusted by the on-board potentiometer and we can provide an optional interface board with a PIC processor to control the other parameters.

MODULATION INTERFACE

The modulation input is DC coupled with filtering for 12.5kHz, 20kHz, 25kHz or 30kHz channel spacing so it can be used with many forms of data.

TECHNICAL SPECIFICATIONS

Frequency Range: ATX170-1 / ATX170-5 138 - 172MHz

ATX470-1 / ATX470-5 406 - 470MHz ATX900-1 850 - 950MHz

Special order: any 20MHz sub-band within 45-900MHz

Programmable

Bandwidth: 20MHz slot within the band

RF Power: ATXxxx-1 10mW to 750mWatt

ATXxxx-5 50mW to 5Watts

Power Requirements: Voltage: 9-12VDC

ATXxxx-1 Current @ 500mW RF Power is 550mA ATXxxx-5 Current @ 5W RF Power is 2.4A

Number of Channels: Any number within the programmable bandwidth

Min. Programmable

Channel Step: 6.25 or 5kHz

Channel Spacing: 12.5kHz, 20kHz, 25kHz or 30kHz

Operating Temp.: $-30^{\circ}\text{C to } +60^{\circ}\text{C}$

Frequency Stability: ± 1.5 ppm over -30°C to +60°C (± 1 ppm Optional)

Size: 96mm W x 64mm D x 20mm H

Weight: Approx 150g

Connectors: Interface: 7 + 7 dual in-line 0.1 inch Pitch pins

Antenna: Coax cable with free right angle chassis mount BNC socket,

or board mounted MCA connector

Modulation input: DC coupled & filtered for 1V to 5V Peak to Peak

Deviation: Adjustable to ± 7.5 kHz of deviation

TX rise time: <6ms

Approvals: With suitable external circuitry, the unit is capable of meeting the following:

European RF: EN 300-086 / EN 300-220 / EN 300-113 / EN 300-224

European CE: EN 301-489 USA: FCC Part 90/15

Canadian: IC

In the interest of improvement the above specifications are subject to change without notice.