

Product Description

800 MHz MT-4E Transmitter



Description:

The 800 MHz MT-4E transmitter (shown to the right) is a high performance, low power FM transmitter capable of P25 digital or analog operation in 12.5 KHz (narrowband) or 25 KHz (wideband) channels. The 800 MHz MT-4E transmitter operates in the frequency band: 799 - 869 MHz.

Daniels UHF MT-4E transmitters can be used in either repeater or base station configurations. When used in base station applications they will transmit clear or secure (encrypted) P25 and analog voice radio communications. When used in repeater applications they will repeat clear or secure (encrypted) P25 and analog voice radio communications. (Secure mode operation is optional.) P25 operation is supported via a purchasable P25 firmware option.

A modular design allows each of the transmitter's internal modules to be individually assembled and tested. This facilitates construction, tuning and maintenance as well as troubleshooting procedures. The transmitter can be programmed with up to 2 banks of 16 channels each. P25 transmitter options such as Frequency, CTCSS, NAC and analog / digital operation are software programmed with the Daniels Radio Service Software package.



Specifications:

Frequency Band	799-869 MHz
Channel Spacing	12.5, and 25 KHz
Channel Selection	6.25 kHz increments
Number of RF Channels	32
Transmitter Switching Range	Unlimited
RF Output Power	0.5 – 3.0 Watts adjustable
Duty Cycle	100% continuous duty
Undesired Emissions (Conducted Spurious)	<-80 dBc
Undesired Emissions (Adjacent Channel Power Ratio (Analog & Digital)	<-60 dBc Analog Wideband <-67 dBc Digital
Hum & Noise Ratio	≥ 31 dB Analog Narrowband TIA 603-C ≥ 37 dB Analog Wideband TIA 603-C
Carrier Frequency Stability	+/- 0.1 ppm (-30°C to +60°C)
Modulation Type (Analog)	11K0F3E (FM) 14K0F3E or 16K0F3E (FM)
Modulation Type (Digital)	8K10F1E (FM), 8K10F1D (FM), 9K2F1D
Audio Distortion (Analog)	<3.0%
Audio Frequency Response (pre-emphasis)	As per TIA 603-C
VSWR Protection	<20:1 (All Phase angles) Includes ½ power alarm
Output Impedance	50 Ω (Type N Connector)
Operating Temperature	-30°C to +60°C
Standby Current	<105 mA no encryption <135 mA encryption
Transmit Current (3.0 W)	<1.80 A
FCC ID (Parts 22 & 90)	H4JUT-4E850
IC Certification Number (Land) (RSS 119)	142A-UT4E850

For further information please contact Daniels Electronics at the address shown below.