

DIGITAL S BAND FM & SOQPSK TRANSMITTER Ref DTX 5563



Special Features.

•Automatic Data Rate Tracking

When DATA/CLOCK signals and DATA RATE information are available, the spectrum bandwidth (include deviation) automatically meet the 99% power bandwidth according to IRIG 106 MSK no filter.

•Intuitive Control

Straightforward configuration and control and platform-independence with serial terminal programming

•Clock-Free Input Option Available

Ideal for replacing analog transmitters or for use with encoders or cryptos that provide a data output, but no clock.

•Variable Power .

4 setting over 16 dB range and power off (20 dBm, 33 dBm, 35 dBm, 37 dBm).

•PCM/FM - SOQPSK

PCM/FM or SOQPSK-TG
 Selectable through RS232.

•Modulation signal input interface

The modulation signal input can be either TTL or RS422, programmable by RS232

•Modulation sense (FM)

Positive or Negative, programmable by RS232

•Box temperature monitoring

The box temperature is monitored through RS232

MAIN SPECIFICATIONS

Carrier frequency range: 2185 to 2475 MHz (programmable)

RF output power: 5 W (37 dBm \pm 1 dB) all conditions.

VSWR < 1.8

Load mismatch (VSWR = ∞): no degradation.

Carrier frequency tuning : 0.5 MHz step

Carrier frequency accuracy: \pm 2.5 ppm over temperature, \pm 7.5 ppm all clauses, including aging over 5 years.

Modulation: SOQPSK-TG (Tier I) or FM (Tier 0) programmable by RS232

Data rate: 1 to 30 Mbps (SOQPSK) and 1 to 15 Mbps (FM).

TTL input impedance: 50 Ohms

Signal interfaces : Serial data with separate synchronous clock, TTL or TIA/EIA-422 (RS-422) programmable by RS 232.

Monitoring & Control interface: RS-232 serial control.

Randomizer (Option): 15 stage LFSR per IRIG 106 selectable for bypass or enable.

POWER REQUIREMENT

28 V DC (18 V min to 36 V max), other on request.

1.7 A at 5 W for 28 V.

Reverse polarity protection.

Thermal protection.

ENVIRONMENTAL CONDITIONS

Non Operating temperature range : - 55 to + 100°C .

Operating temperature range : - 40 to +85°C .
 (100°C max baseplate).

Operating Humidity: 95 %

Vibration: 20 Hz to 2000 Hz:

20 g random 3 axes.

Shock: 6 ms, 70 g 3 axes.

Acceleration: 40 g 3 axes.

Altitude: 100 000 ft maximum.

EMI: MILSTD 461 F.

DIMENSIONS

Dimensions (L x h x l): 91.4 x39.2 x 66 mm without heatsink, need thermal resistance below 0.75K/W to correctly operating without permanent damage.

Weight: 390 g without heatsink.

RF output connector: SMA.

Power connector, Signal and Control interfaces: MDM 15.

*Specifications subject to change without notice.

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