

ST1-07



VTX 6536 NT COMPACT TELEMETRY TRANSMITTER

The VTX 6536 NT telemetry transmitter is built around a state of the art phase locked loop FM exciter followed by a high efficiency power amplifier. The transmitter offers a very wideband frequency response from 1 Hz to 40 MHz (-3 dB) which allows High Bit Rate (up to 32 Mbps) or colour HD video-data transmission.

The used technology allows the unit to operate under the environments as found in aircraft applications.

MAIN FEATURES:

- Synthesized output frequency
- Very wide modulation response
- Very high carrier deviation

MECHANICAL SPECIFICATIONS

• Weight : 220 g

• Dimensions : 76.2 x 50.8 x 25 mm

Connectors

- Modulation input- RF output: SMA female: SMA female

- Supply : DCS 10Y-6-4-PN DEUTSCH

- Frequency control : TYCO 21 pins

ELECTRICAL SPECIFICATIONS

RF Characteristics

Type : Direct frequency PLL synthesized FM exciter
 Frequency range : 2100 – 2700 MHz (200 MHz sub-band)

• Frequency stability : $\pm 0,0025\%$ (-20° , $+80^{\circ}$ c)

• Frequency control : Prewired program plug (250 KHz step)

• Output power : 5 W (4.5 W min @ + 70°C case temperature)

• Admissible load VSWR : Infinite any phase (isolator protected)

• Carrier peak deviation : Up to 5 MHz

• Spurious : - 25 dBm corresponding to

 $-[55 + 10\log Po(W)]$

• Incidental FM deviation : 10 KHz RMS (in the environment range)

Modulation Characteristics

Frequency response (- 3 dB)
 Deviation sensitivity
 1 Hz - 40 MHz
 4 MHz / 1 Vpp max

• Input impedance : 50Ω (75 Ω or $10 K\Omega$ on request)

Power requirements

• Voltage : 24 − 32 VDC

• Current : 1.3 A

• Protection : Reverse polarity

ENVIRONMENTAL

• Operating temperature : -40° c to $+85^{\circ}$ c (base plate).

• Storage temperature $: -55^{\circ}c \text{ to } + 100^{\circ}c.$

• Vibration sine : 20g, 20-2000 Hz, 3 axis.

• Vibration random : $0.45 \text{ g}^2 \text{ Hz}^{-1}$, 20-2000 Hz, 3 axis.

• Static acceleration : 40 g, 3 axis.

Shock : 100 g, 11ms, 3 axis.
 Low pressure : up to 25 000m.

• EMI : MIL STD 461, 462, 463A.

(CE03, CE04, CE05, RE02).

(CS01, CS02, RS01, RS02, class 1C).

