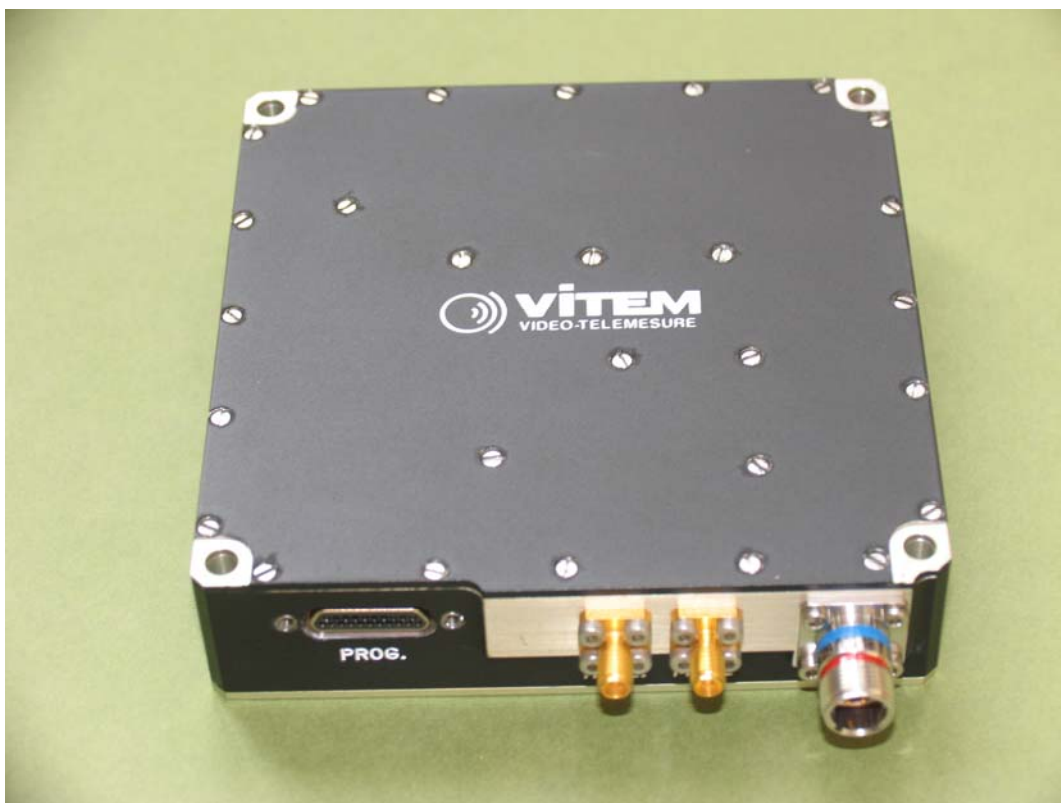




Distributed by:  
AA SYSTEL France  
9, rue RAVEL, 91620 NOZAY / France  
TEL: + 33 1 6963 8630  
FAX: + 33 1 6963 8474  
E-mail: wang.huiqin@a-a.fr  
Beijing mobile: +86 138 010 11504

## VTX 5500 NT – 2P SERIES BPSK TELEMETRY / TELEVISION TRANSMITTER



The VTX 5500 NT – 2P series differential encoding BPSK Transmitter is built around a “state of the art” low phase-noise BPSK modulator followed by a phase-locked synthesized up-converter to feed an high efficiency ASGA RF power amplifier.

The used technology allows the unit to operate under the severe environments as encountered in aircraft, UAV or missile applications.

### MAIN FEATURES :

- Low phase-noise modulator
- Differential encoding for coherent demodulation (without “unique word”) or differential demodulation use
- High bit-rate (up to **32 Mbps**)

CONCEPTION ET RÉALISATION D'ÉMETTEURS ET RÉCEPTEURS EMBARQUÉS

6, PLACE ARISTIDE-BRIAND - BP 55 - 91470 LIMOURS - FRANCE

TÉL. (33) 1 64 91 71 94 FAX (33) 1 64 91 71 98 E-MAIL : vitem.sa@free.fr

S.A. AU CAPITAL DE 190 561,27 € - RCS EVRY B 390 318 798 - SIRET 390 318 798 000 27 - APE 322 A - FR 51 390 318 798

## MECHANICAL SPECIFICATIONS

- Weight : 450 g (VTX 5533 WT – 2P)  
550 g (VTX 5540 WT – 2P)
- Dimensions : 90 x 100 x 24 mm (VTX 5533 WT – 2P)  
100 x 100 x 25 mm (VTX 5540 WT – 2P)
- Connectors
  - RF : SMA Female
  - Modulation : 2 SSMA female (signal + clock)
  - Frequency control : MALCO 21 pin
  - Power supply : DEUTSCH DCS 10Y-6 4-PN

## ELECTRICAL SPECIFICATIONS

### RF Characteristics

- Type : BPSK modulator up-converted into S-band
- Frequency range : S-band 2100 – 2700 MHz (200 Mhz sub-band)
- Frequency stability : +/- 0.0025%
- Frequency control : prewired program plug (500 KHz step)
- Output power : **2 W** (VTX 5533 NT-2P)  
**10 W** (VTX 5540 NT-2P)
- Admissible load VSWR : infinite any phase (isolator protected)
- Spurious : - 25 dBm corresponding to  $-(55 + 10 \log P_o(W))$
- Incidental PM deviation : 3° rms.

### Modulation Characteristics

- Bit rate : **up to 32 Mbps**
- Input impedance : 50 ohms

### Power Requirements

- Voltage : 12 - 18 VDC
- Current : **2 A** (VTX 5533 NT-2P)  
**5 A** (VTX 5540 NT-2P)
- Protection : reverse polarity

## ENVIRONMENTAL

- Operating temperature : - 40°C, + 85°C (base plate)
- Storage temperature : - 55°C, + 100°C
- Vibration sine : 20g, 20 – 2000 Hz, 3 axis
- Vibration random : 0.45g<sup>2</sup>/ Hz, 20- 2000 Hz, 3 axis
- Static acceleration : 100g, 3 axis
- Shock : 100g, 11 ms, 3 axis
- Low pressure : up to 25000 m
- EMI : MIL STD 461, 462, 463 A

**Main references** : MBD.A (missiles), Dassault Aviation (fighter aircraft), Eurocopter (helicopter), ARIANA launcher, French flight test centers.

And others overseas customers in Canada, China, India, Italy,....