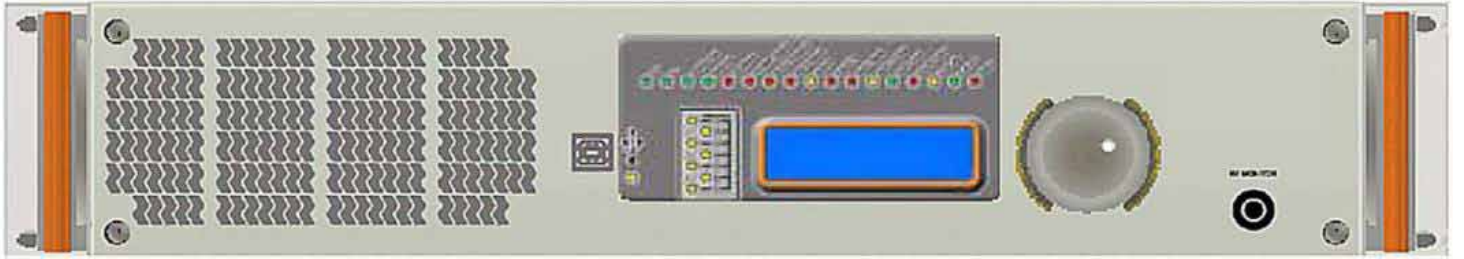




# UT100

## 100 W ANALOG UHF TV TRANSMITTER



### GENERAL FEATURES

- **HIGHT QUALITY** : STATE OF THE ART OF THE PERFORMANCE
- **NOMINAL RF POWER** : > 100 W p.s. @ IMD > - 60 dB
- **PA DIGITAL READY**: WITH THE LAST TECHNOLOGY DEVICES THE PA CAN BE USED ALSO FOR DTV
- **FREQUENCY AGILE EXCITER**: AGILE TV EXCITER IN BD. UHF
- **AVAILABLE STANDARDS**: PAL, SECAM ( other on request)
- **VERY COMPACT**: 1 HE EXCITER + 2 HE PA ( USUALLY HOUSED INTO A 15 HE RACK 19")
- **VERY LOW VIDEO SIGNAL NOISE** : TYP. 65 dB
- **EXTREMELY HIGHT LOW DISTORTION**: THD, IMD & TIM TYP. 0,03%
- **EFFICIENT IF PRECORRECTOR**: FOR AN EASY OPTIMIZARTION OF THE OPERATING
- **REMOTE CONTROL**: RS 232 / 485 PORT
- **FULL- RANGE PFC POWER SUPPLY**: 90 – 260 VAC MAINS VOLTAGE
- **COMPLIANT WITH ALL THE STANDARD**: EBU- ETSI - CCIR

### OPTIONS

EXTERNAL CLOCK FOR OFFSET CONTROL OF THE PLL ( 1-2-2,5-5-10 MHz)



# UT100

## 100 W ANALOG UHF TV TRANSMITTER

### GENERAL

**Power Output:** 100 W p.s adjustable from front panel.  
**RF Output Impedance:** 50 ohm.  
**RF Output Connector:** "N" type.  
**Monitor RF:** -54 dBc, BNC connector  
**VSWR:** 1.5:1 Maximum with automatic fold-back at higher VSWR  
**Frequency Range:** 470-860 MHz  
**Available standards:** PAL G, SECAM (others on request)  
**Frequency Stability:**  $\pm 1$  ppm from -5 to 50°C.  
**Reference:** TCXO 12.8 MHz. Can be synchronized by 1-2-2.5-5-10 MHz self select external clock (optional).  
**I. M. D. (-8, -10, -16 dB):** Better than -58 dBc at rated output power (typical -60 dBc).  
**Frequency Control:** Synthesizer  $\mu$ processor control.  
**Off Lock Attenuation:**  $\geq -80$  dBc.  
**Asynchronous AM S/N Ratio:** -70 dB below  
**RF Harmonics:** Exceeds ETSI/CCIR/FCC requirements.  
**RF Spurious:** Exceeds ETSI/CCIR/FCC requirements.

### AUDIO PARAMETERS

**Audio Input Impedance:** 600 ohm balanced, 10 Kohms unbalanced.  
**Audio Input Level:** -3 to +9 dBm.  
**Input Connector:** XLR female.  
**Audio Frequency Response:**  $\pm 1$  0.15 dB, 30 Hz to 15 KHz.  
**Preemphasis:** Flat/50/75 $\mu$ s selectable from front panel  
**Total Harmonic Distortion + Noise:** 0.03% @ 400 Hz  
**Intermodulation Distortion:** 0.03%, 1 KHz/1.3 KHz, 1:1 ratio  
**Transient Intermodulation Distortion:** 0.03%, 2.96KHz square wave and 14 KHz sine wave.  
**Distortion:** 0.03%, 2.96KHz square wave and 14 KHz sine wave.  
**FM S/N Ratio:** -85 dB RMS detector, -82 dB below  $\pm 1$  75 KHz deviation, 50  $\mu$ s de-emphasis, weighted.

### VIDEO PARAMETERS

**Video Input Impedance:** 75 ohm unbalanced.  
**Video Input Level:** -1 V p.p.  $\pm 3$  dB  
**Input Connector:** BNC female.  
**Amplitude/ Frequency Response:**  $\pm 0.5$  dB.  
**Differential Gain:**  $\leq 5\%$   
**Differential Phase:**  $\leq 3^\circ$   
**Group Delay:**  $\pm 35$  ns  
**S/N Ratio:**  $\geq -65$  dB

### AUXILIARY CONNECTIONS

**RS232 / RS 485:** Serial Interface connector back anel.  
**Telemetry Interface:** connector DB25F back panel.  
**External Clock:** connector BNC female (optional).

### OPTIONS

**External clock:** for PLL synchronization purpose 1-2-2.5-5-10 MHz external reference oscillator with self selection of the incoming frequency.

### ELECTRICAL

**AC Input Power:** 90 $\div$ 260 VAC 50/60 HZ single phase.  
**Cos  $\Phi$**  > 0.98

**Cooling:** Forced air with internal fans.

**Acoustic noise:** < -56 dBa @ 1 meter.

### ENVIRONMENTAL

**Operating temperature:** -5°C to +50°C.

**Max Operating Altitude:** 2000 mt.

**Relative Humidity Range:** 0 to 95% non condensing.

### PHYSICAL DIMENSION

**Mounting:** 15 unit cabinet.

**Size:** 570 mm. W x 800 mm. D x 800 mm. H.

**Weight:**  $\sim 75,0$  Kg.

Features and specifications subject to change without notice