

# مشخصات فنی

## 1.1 FREQUENCY - POWER

Frequency range-----	87.5 to 108.0MHz
Frequency setting -----	10 KHz steps
Internal setting mode -----	by keys
External setting mode-----	by Optional remote control ( GSM-TCP/IP-RS232-RS485 )
Frequency stability-----	±500Hz/year
Frequency generation-----	PLL synthesizer
Modulation type-----	direct VCO frequency modulation
Nominal frequency deviation -----	±75KHz
RF output power-----	0 to 10-20-50-100-200
Power resolution setting -----	1-5W
Power control stability-----	< 0.2dB
Reverse output power control limit -----	1 to 30W
Harmonics emission -----	<-70dBc
Spurious emission -----	<-95dBc
Carrier reduction power ( carrier enable off )-----	>70dBc

### 1.3 MODULATION CAPABILITY

MONO (left or right)	-----	30Hz to 15KHz
STEREO (by internal stereo generator OPT)	-----	30Hz to 53KHz
MPX1 & MPX2 (opt) COMPOSITE (MONO or STEREO +RDS+ SCA)	-----	30Hz to 75KHz
AES-EBU up to 192KHz or IP Audio (opt)	-----	30Hz to 53KHz
SCA (opt)	-----	30Hz to 100KHz
RDS Ext	-----	30Hz to 100KHz
RDS Int (by internal RDS generator OPT)	-----	57KHz

### 1.4 CHARACTERISTICS IN MPX

Signal input	-----	MPX Unbalanced
Input impedance	-----	600Ω or 10kΩ
Input level	-----	0/+6/+12/dBm or Variable input level capability
Audio frequency response ( 50Hz to 57KHz)	-----	±0.5dB
Total Harmonic Distortion THD	-----	<0.02%
Signal to noise referred at deviation of 75KHz	-----	>80dB

### 1.5 CHARACTERISTICS IN MONO

Signal input	-----	Left or Right
Input impedance	-----	600Ω (balanced) or 10kΩ
Unbalance rejection	-----	>40dB
Input level	-----	0/+6/+12/dBm or Variable input level capability
Pre-emphasis	-----	std.50μs ( opt 75uS )

Audio frequency response ( 50Hz to 15KHz) -----  $\pm 0.5$ dB

Total Harmonic Distortion THD -----  $< 0.02\%$

Signal to noise referred at deviation of 75KHz -----  $> 82$ dB

## **1.6 CHARACTERISTICS IN STEREO**

Signal inputs ----- Left & Right

Input impedance -----  $600\Omega$  (balanced) or  $10k\Omega$

Unbalance rejection -----  $> 40$ dB

Input level -----  $0/+6/+12$ /dBm or Variable input level capability

Pre-emphasis ----- std.  $50\mu s$  ( opt  $75\mu s$  )

Audio frequency response (30Hz to 15KHz) -----  $< 0.25$ dB

Cross-talk between left and right channel -----  $> 50$ dB

Total Harmonic Distortion THD -----  $< 0.1\%$

Signal to noise referred at deviation of 75KHz -----  $> 77$ dB

Suppression of 38KHz -----  $> 70$ dB

Spurious suppression outside band ----- .in according to ETS 300-384

Pilot reference for RDS encoder (19 KHz out) -----  $1V_{pp}$