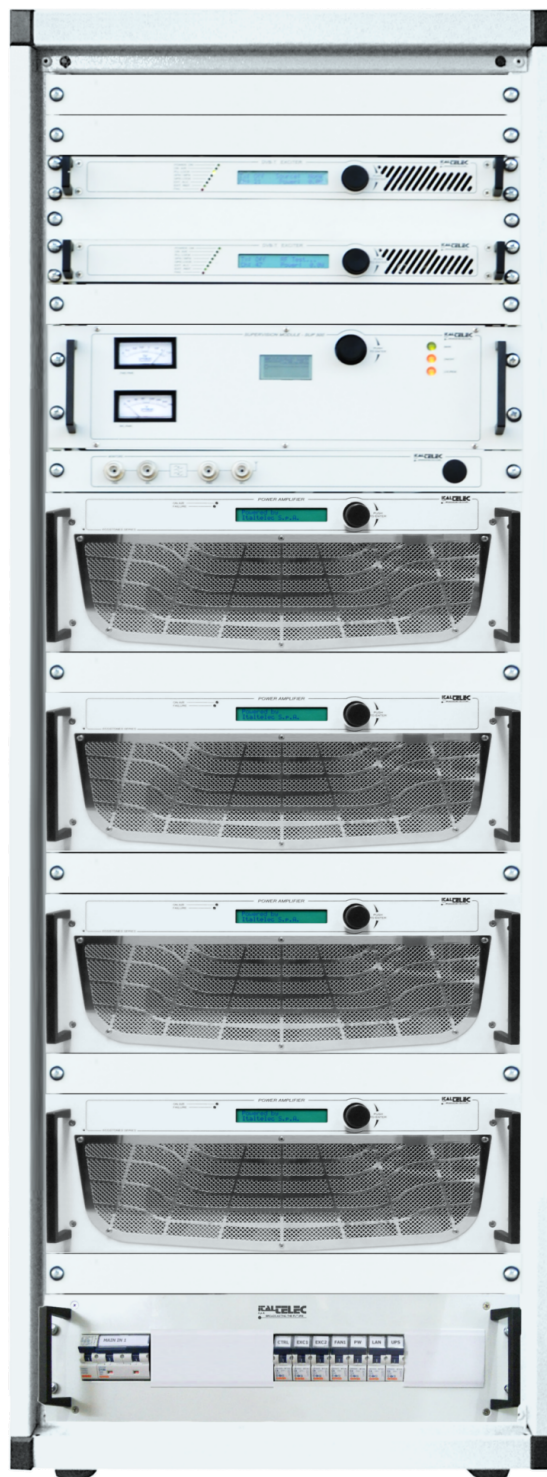


DTV AC HPA 300-3500

Air Cooled Medium and High Power Multistandard Transmitters

Main Characteristics

- High efficiency, low power consumption
- Configurations: Stand Alone, Dual Drive, 1+1, N+1 solutions.
- Available in all analogue standards (PAL SECAM NTSC) with digital processing for high performances
- Available in all digital standards (DVB-T/T2, ISDB-T/Tb, ATSC) with adaptive precorrector
- Available in band I - III - IV - V.
- Internal Monitoring to control the quality of transmission signal options
- Integrated Satellite and GPS receiver options
- Dual ASI seamless with priority selection
- IP input with priority selection (optional)
- Web server, SNMP protocol



DTV AC HPA 300-3500

Air Cooled Medium and High Power Multistandard Transmitters

GENERAL

Frequency Range	Band I, III, IV, V
Channel Bandwidth	6, 7, 8 MHz
RF Load Impedance	50 ohms, 1:1 VSWR over any single TV channel
RF Output Connector	7/8 or 1" - 5/8 or 3"1/8

AC MAINS

AC Line Voltage	3-phase 50/60 Hz, 380 to 415 V
AC Line Variation	10% to -15%
Power Factor	> 0.97
Power Efficiency	see Power Table

ENVIRONMENTAL

Altitude	Up to 4,000m above sea level
Ambient Temperature	14° to 113° F (-10° to 45° C) at sea level
Humidity	Up to 95%, non-condensing
Cooling Method	Forced Air
Acoustic Noise	< 65 dBA (measured 1m in front of cabinet)

ANALOG

Tv Standards	B/G/D/K/K1/M/N
Colour Systems	PAL, NTSC
Video Input Interfaces	2 BNC 75Ω, 1Vpp±6 dB.
Modulation Depth	5±15 %
Audio Input Interfaces	2 XLR 600Ω/5 KΩ, balanced / unbalanced, 0dBm -6dB +21dB
Audio encoder mode	Mono/Stereo/Dual Sound
Fm Deviation	Up to 100 KHz (200 KHz for standard M), Hard Limiter 1KHz step
Power Output	see Power Table
Output Power Reduction	0 to -10dB

MECHANICAL

	Dimensions (WxHxD)	Weight (approx.)
DTV AC HPA 300	mm 1800x2100x800	Kg 352
DTV AC HPA 600	mm 1800x2100x800	Kg 414
DTV AC HPA 1000	mm 1800x2100x800	Kg 476
DTV AC HPA 2000	mm 1800x2100x800	Kg 598

COFDM: DVB-T/T2, ISDB-T/Tb (SBTVD)

Systems	ISDB-T, ISDB-Tb, DVB-T, DVB-T2
Digital Inputs	ISDB-T/Tb: 3 BNC 75Ω ASI (Hierarchical up to 3 Layers) DVB-T/T2: 2 BNC 75 Ω, DVB-ASI (Hierarchical) IP-To-ASI: RJ45
Crest Factor	Maximum 13 dB
Shoulder Level	> 40dB
MER	> 37dB
Harmonics (before filter)	< -40dB
Central Carrier Suppression	> 75dB
Frequency Stability (without ext. ref.)	± 150 Hz/month
Frequency Offsets	1 Hz resolution
MPEG packet length	188/204 byte packets, continuous and burst
Network Operations	MFN, SFN
Optional Output filter (NCM) with insertion loss	0.3 dB @ F.C. 0.7 dB @ F.C. ± 3.8 MHz
Power Output	see Power Table
Output Power Reduction	0 to -10 dB

8-VSB: ATSC

System	ATSC A-53, 8-VSB DTV standard
Digital Input	2 BNC 75 Ω ASI (SMPTE 310M)
Internal Precise Frequency input	10 MHz (I)
Internal Gps Receiver	Optional
Phase Noise	< 104 dBc/Hz @ 20 kHz offset (ATSC A/64)
Pilot Frequency Stability	Less than ±150 Hz/month Less than ±3 Hz with internal or external PFC
Harmonic Radiation and Spurious	Meets mask requirements specified in FCC 5th and 6th report and order
Sideband Performance	Compliant with FCC radiation mask, when measured at the output of optional output filter
Optional output filter with insertion loss	0,3 dB @ F.C. 0,5 dB @ F.C. ± 2,7 Mhz
Power Output	see Power Table
Output Power Reduction	0 to -10 dB

Power Table

SYSTEM	Analogic		DVB-T/T2, ISDB-T/Tb			ATSC		
	Max Output (Wps)	Efficiency	Max Output (Wrms)	Efficiency	Efficiency Doherty	Max Output (Wrms)	Efficiency	Efficiency Doherty
DTV AC HPA 300	1200	65%	300	25%	38%	500	32%	42%
DTV AC HPA 600	2400	65%	600	25%	38%	1000	32%	42%
DTV AC HPA 1000	4000	65%	1000	25%	38%	1900	32%	42%
DTV AC HPA 2000	7000	65%	2000	25%	38%	3500	32%	42%