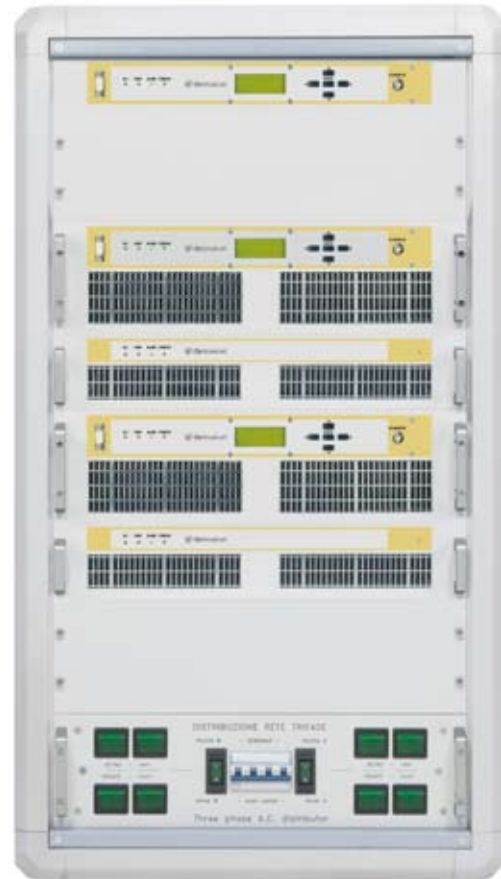


DUAL CAST TV VHF Power Amplifiers

DTA 125/500V - 500 W P.SYNC DTA 250/1KV - 1000 W P.SYNC
 DTA 500/2KV - 2000 W P.SYNC

The DTA SERIES Dual Cast equipment are solid state amplifiers for digital and analogue television broadcast applications designed with ultimate technology to operate in the UHF 470÷860MHz frequency band (Band IV & V). Size and weight have been reduced to obtain a compact unit. The improved performance has been achieved by means of an advanced approach in the design, focusing on low power consumption and on excellent linearity over the entire operational band. High reliability is mainly guaranteed by using a limited number of transistors to achieve a given power target and by using over dimensioned cooling devices: broadcasters can thus reduce their long-term system costs. Final power modules incorporate micro-strip technology and LDMOS, MRF377H, push-pull transistors. Ultimate and innovative microprocessor technologies have been implemented for the protection and control circuits.



Forced cooling
 High efficiency and reliability
 High linearity over the entire band
 ALC and Input Over Drive Protection Functions
 LCD multifunctional display
 RJ 45 Ethernet connection and RS 232 and RS 485 IN & OUT

Metering Board controlled by Microprocessor
 Power supply with PFC Active
 WEB monitoring and SNMP for remote control
 - WEB monitoring and SNMP for remote control

CODE	MODEL	DESCRIPTION
F873.01	DTA 100/400V	Power amplifier VHFIII 400W ATV / 100W rms; DVB 150W DAB
F875.02	DTA 200/800V	Power amplifier VHFIII 800W ATV / 200W rms; DVB 300W DAB
F874.03	DTA 400/1,6KV	Power amplifier VHFIII 1600W ATV / 400W rms; DVB 600W DAB
AVAILABLE OPTIONS	Cabinet with air extractor	

Technical data

FREQUENCY		STANDARDS TV VERSION	
Range	VHF (170-230 MHz)	TV standards analog	B,G others on request
Class	AB	TV Standards digital	DVB-T/H
Input Connector	N female	REMOTE CONTROL	
Impedance Input /Output RF Connector	50 Ohm	Output Connector	RS232 interface Connector DB9 Male – Two DB9 Female programmable connector – RS 485
Gain	28 ÷ 30 dB (DTA100/400V 14dB)	Input Connector	Reset and muting control activated by ground closure
Input VSWR	1.7:1 typical (2:1 max.)	Ethernet interface (option)	Connector RJ 46 WEB browser or SNMP client
RF OUTPUT SPECIFICATIONS		STANDARDS COMPLIANCE	
Intermodulation distortion (DVB-T)	< -36 dB at rated output power (With pre-correction inserted)	Frequency Spectrum	EN 302 296 – EN302 297
Spurious emission (with output filter)	< -55 dBc	EMC	EN 300-489-1 EN 301 489-14
Load mismatch	1,8:1 Max	Safety	EN 60950 - EN 60215
BER	Zero over five hour period before RS decoding	TEMPERATURE	
MER	> 37 dB	Operating range	0° to 45° C (Meets ETS 300 019 requirements)
Protections	Overpower, SWR, Over voltage, Over current, Over temperature	Storage range	- 10° to 80° C
Probe	SMA BNC connector RF – 60 dBc	Maximum relative Humidity	90% non condensing
		Max Operating Altitude	2000 mt. a.s.l.



SPECIFICATIONS	DTA 125/500 V	DTA 250/1KV	DTA 500/2KV
RF output power DVB	125 W rms	250 W rms	500 W rms
RF output power DAB	250 W rms	500 W rms	1000 W rms
RF output power +0dB –0,5dB	500 W psync	1000 W psync	2000 W psync
RF Input (Nominal Level)	≤ 4W	≤ 1Watt	≤ 2Watt
Output Connector	N Type Female	7/16 N Type Female	7/16 N Type Female
Dimensions (W x H X D) mm	482 x 132 x 700	482 x 132 x 700 + 482 x 88	482 x 132 (+88) x 700 (2 pscs)
Weight	25 Kg	30 Kg	30 Kg + 13 Kg +13kg
Power consumption			
ATV @ Pmax	< 800 VA	< 1800 VA	< 3600 VA
DVB @ Pmax	< 500 VA	< 1200 VA	< 2400 VA
Power supply req.	from 230 V a.c. ± 15%	from 230 V a.c. ± 15%	three-phase 380 V a.c. ± 15%
Nr. of power supply boards	1	2	3
Number of fans	1 blower, 24 Vdc	2 blower, 24 Vdc	2+2 blower, 24 Vdc