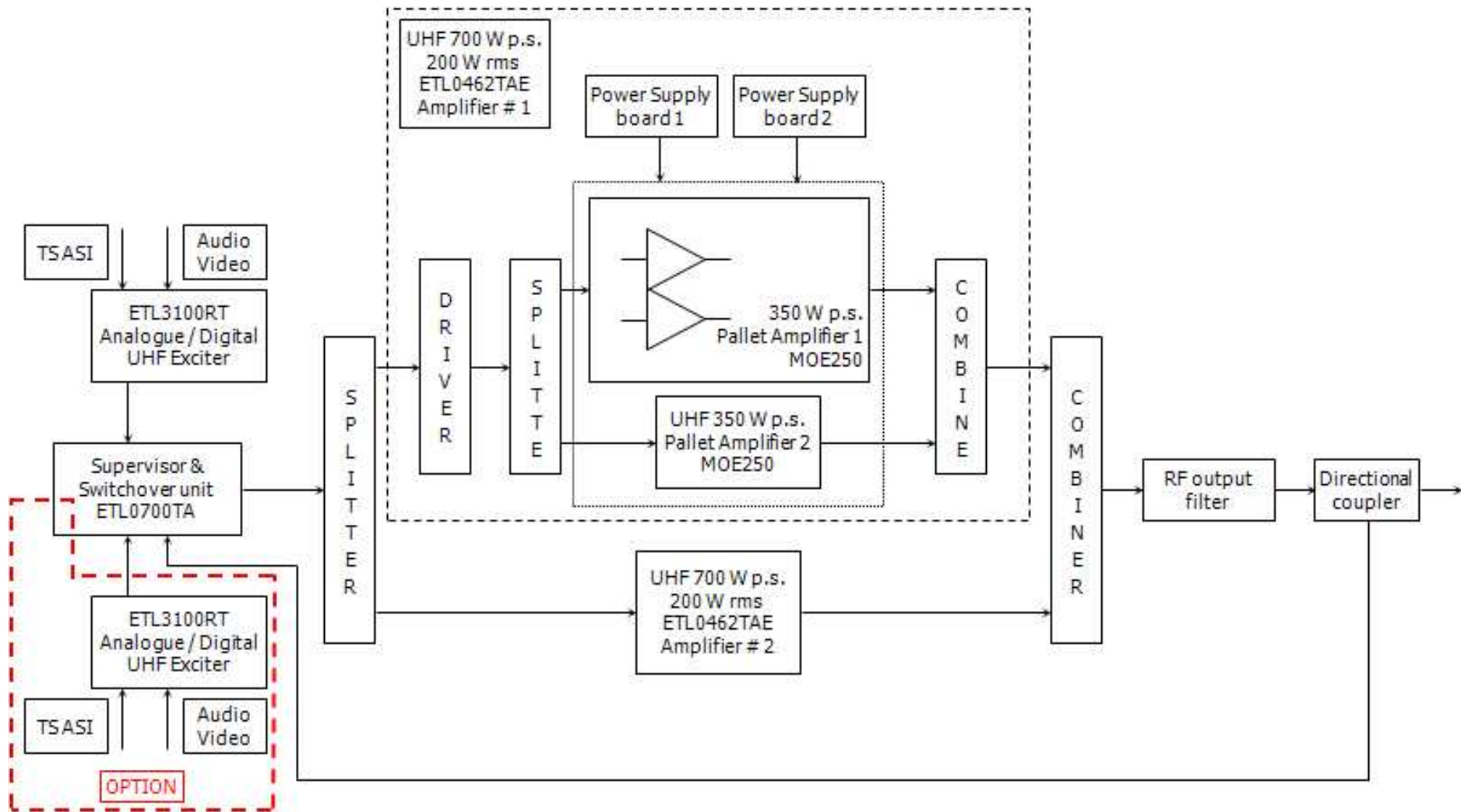




**1 KW p.s. or 400 W rms UHF SOLID STATE
TV TRANSMITTER
Dual Cast
Model: ETL1480TAE-TX**



1KW p.s. OR 400 W rms UHF DUAL CAST SOLID STATE TV TRANSMITTER BLOCK DIAGRAM



ANALOGUE TECHNICAL SPECIFICATIONS

General

Primary power	230 V Single phase or 400V three phase. $\pm 15\%$ 47 to 60 Hz, Consumption: 2500 W @ 50% A.P.L. at 1KW vision carrier power.
Cooling	Air cooled
Operating temperature range	0°C to +45°C.
Storage temperature range	-10 to +70°C.
Nominal UHF output power	1KW
Protections	Over-voltage (crowbar). Over-current. Over-temperature. Excessive reflected RF output power. RF output power too high. RF output power too low. RF drive power too high (over-drive).
Alarms & Warnings	RF Forward power too high (alarm). RF Forward power too low (alarm). RF drive power too high (over-drive alarm). RF Reflected power too high (alarm). High heat-sink temperature (warning). High heat-sink temperature (alarm).

Input Parameters

Video input parameters

Input signal level	1 V p.p.
Input impedance	75 Ω , unbalanced.
Input return loss	>30 dB.

Audio input parameters

Input signal level	+8dBu at +/- 50KHz pk. dev.
Input impedance	600 Ω or > 3 k Ω .
Test tone nominal frequency	400Hz

Output Parameters

Output frequency range	BANDS IV/V: 470-860 MHz.
Gain flatness	<1 dB.
Output impedance	50 Ω , unbalanced.
Permissible VSWR	<1.5
Standard Output power	1 KW p.s.
Spurious suppression	> 60 dB.
Harmonic suppression	> 60 dB.
I.M.D. Products Suppression (with driver series ETL3100 or ETL2900)	> 60 dB (-8, -10, -16 dB) @ rated output power, with pre-correction inserted.

Transmission Quality

(with driver series ETL3100)

Vision weighted S/N ratio (CCIR 567)	> 62 dB.
Amplitude Frequency response	\pm .5 dB within the Vision band.
Group Delay deviations	\pm 30 ns within the Vision band.
Luminance non linearity	< 5%.
Differential Gain error	< 3%.
Differential Phase error	< 3 $^{\circ}$.
Audio distortion	\pm .5 % @ 1KHz.
Audio frequency S/N ratio	> 60 dB @ 50 KHz deviation.
Audio deviation limiter	Selectable.
Audio Amplitude Frequency response	< \pm .5 dB, 40Hz to 15kHz.

Dimensions and Weight

Dimensions	34U Standard 19" Rack cabinet. 600 W, 1000 D, 1800 H, mm.
Weight	Approx 150 kg.

Data may change without notice.

DIGITAL TECHNICAL SPECIFICATIONS

General

Primary power	230 V Single phase or 400V three phase. $\pm 15\%$ 47 to 60 Hz, Consumption: 2000 W at 400W rms.
Cooling	Air cooled
Operating temperature range	0°C to +45°C.
Storage temperature range	-10 to +70°C.
Nominal UHF output power	400W rms
Protections	Over-voltage (crowbar). Over-current. Over-temperature. Excessive reflected RF output power. RF output power too high. RF output power too low. RF drive power too high (over-drive).
Alarms & Warnings	RF Forward power too high (alarm). RF Forward power too low (alarm). RF drive power too high (over-drive alarm). RF Reflected power too high (alarm). High heat-sink temperature (warning). High heat-sink temperature (alarm).

Input Parameters

Input signal	MPEG-2 ASI
Input impedance	75 Ω
External reference frequency	5 MHz or 10 MHz
External reference impedance	50 Ω
Time reference input frequency	1PPS
Time reference input impedance	50 Ω

Output Parameters

Output frequency range	BANDS IV/V: 470-860 MHz.
Gain flatness	<1 dB.
Output impedance	50 Ω , unbalanced.
Permissible VSWR	<1.5.
Standard Output power	400 W rms
Spurious suppression	> 60 dB.
Harmonic suppression	> 60 dB.
Tuning resolution	1 Hz.
Long term output frequency stability	< 1 PPM internal reference or in accordance with ext. reference accuracy
MER	36dB Typ.
Shoulders	40dB Typ.

Supported Modes

IFFT mode	2K, 4K, 8K.
Guard intervals	1/4, 1/8, 1/16, 1/32
Code Rates	1/2, 2/3, 3/4, 5/6, 7/8
Modulation mode	QPSK, 16-QAM, 64-QAM
Hierarchical mode	Alpha 1-2-4 16-QAM, 64-QAM
Network mode	SFN and MFN
Bandwidth	8MHz, 7MHz, 6MHz and 5MHz.

Pre-correction

Digital linear pre-correction

In band group delay and amplitude real time correction.

Digital non-linear pre-correction

Broad band non linear Phase and amplitude real time cubic correction.

Up to 4 phase and amplitude curve storable in eeprom memory

Dimensions and Weight

Dimensions

34U Standard 19" Rack cabinet.

600 W, 1000 D, 1800 H, mm.

Weight

Approx 150 kg.



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