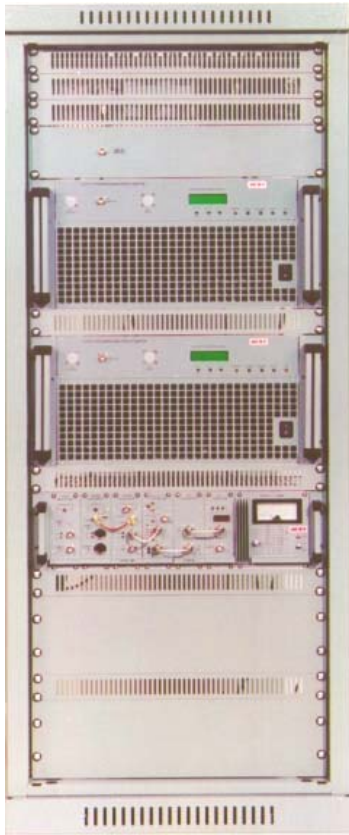


ETL TV Series, Solid State UHF / VHF

500 W, 1 kW, 2 kW & 3 kW, Field Channel Programmable



480TAD-TX shown

- Available as Transmitters or as Translators
- 2 Video & 2 Audio inputs w/ default switchover (except 500 models)
- Stereo/dual sound compatible & available in all TV Standards Worldwide
- Group delay pre-correction and available for offset configuration
- High Efficiency, Switch-Mode Power Supply
- Microprocessor controlled measuring and full protection
- Built-in redundancy in power supply and output modules
- LCD readout display and RS-485 Serial Data In/Out
- Meets or exceeds all FCC & CCIR requirements

Low Band VHF SYSTEMS / Output Power (nominal/rated):

470TAV1-SX: 500/800 W Transmitter, 570TRS+470TAV1, LB VHF out
 470TAV1-SP: 500/800 W Translator, 560TRS+470TAV1, LB VHF out
 470TAV1-TX: 500/800 W Transmitter, 310TRS+470TAV1, LB VHF out
 470TAV1-TP: 500/800 W Translator, 290TRS+470TAV1, LB VHF out
 480TAV1-SX: 1000/1600 W Transmitter, 570TRS+480TAV1, LB VHF out
 480TAV1-SP: 1000/1600 W Translator, 560TRS+480TAV1, LB VHF out
 480TAV1-TX: 1000/1600 W Transmitter, 310TRS+480TAV1, LB VHF out
 480TAV1-TP: 1000/1600 W Translator, 290TRS+480TAV1, LB VHF out
 550TAV1-TX: 2000/3000 W Transmitter, 310TFS+550TAV1, LB VHF out
 550TAV1-TP: 2000/3000 W Translator, 290TFS+550TAV1, LB VHF out

High Band VHF SYSTEMS / Output Power (nominal/rated):

470TAVD-SX: 500/800 W Transmitter, 570TFS+470TAV, HB VHF out
 470TAVD-SP: 500/800 W Translator, 560TFS+470TAV, HB VHF out
 470TAVD-TX: 500/800 W Transmitter, 310TFS+470TAV, HB VHF out
 470TAVD-TP: 500/800 W Translator, 290TFS+470TAV, HB VHF out
 480TAVD-SX: 1000/1600 W Transmitter, 570TFS + 480TAV, HB VHF out
 480TAVD-SP: 1000/1600 W Translator, 560TFS + 480TAV, HB VHF out
 480TAVD-TX: 1000/1600 W Transmitter, 310TFS + 480TAV, HB VHF out
 480TAVD-TP: 1000/1600 W Translator, 290TFS + 480TAV, HB VHF out
 550TAVD-TX: 2000/3000 W Transmitter, 310TFS + 550TAV, HB VHF out
 550TAVD-TP: 2000/3000 W Translator, 290TFS + 550TAV, HB VHF out

Note: In some countries, UHF is called Band 4 & 5; High Band VHF is called Band 3; Low Band VHF is called Band 1

UHF SYSTEMS / Output Power (nominal/rated):

470TAD-SX: 500/750 W Transmitter, 570TAS+470TAD, UHF out
 470TAD-SP: 500/750 W Translator, 560TAS+470TAD, UHF out
 470TAD-TX: 500/750 W Transmitter, 310TAS+470TAD, UHF out
 470TAD-TP: 500/750 W Translator, 290TAS+470TAD, UHF out
 480TAD-TX: 1000/1500 W Transmitter, 310TAS + 480TAD, UHF out
 480TAD-TP: 1000/1500 W Translator, 290TAS + 480TAD, UHF out
 550TAD-TX: 2000/3000 W Transmitter, 310TAS + 550TAD, UHF out
 550TAD-TP: 2000/3000 W Translator, 290TAS + 550TAD, UHF out

Video Inputs

Input level 1V p-p -3 to +6 dB adj.
 Input impedance 75 ohm
 Return loss > than or equal to 35 dB
 Crosstalk > than or equal to 56 dB up to 5 MHz

Audio Inputs

Input level for 50 KHz deviation -12dBm - +6 dBm
 Input impedance (balanced) > than or equal to 5 K ohm
 Crosstalk > than or equal to 70 dB
 Common mode rejection > than or equal to 40 dB

Video Processor

Clamp circuits referred to back porch or sync tip
 White clipper threshold 95% of modulation
 (color subcarrier not affected)

RF Input Connector (Translator models): "N" Type Female

VIDEO TRANSMISSION CHARACTERISTICS

Amplitude frequency response ±0.4 dB up to 4.8 MHz
 Group delay < than or equal to 40 ns up to 4.8 MHz
 Chroma/Luminance gain inequality < than or equal to 5%
 Static non linearity < than or = to 5% up to 90% mod.
 Differential gain < than or = to 5% up to 90% modulation
 Differential phase < than or = to 3° up to 90%
 K factor < than or equal to 1.5%
 50 Hz square view distortion < than or equal to 1.5%
 S/N ratio (unweighted) < than or equal to -57 dB
 S/N ratio (weighted) < than or equal to -64 dB
 Sync compression < than or equal to 5%
 ICPM < than or = to 5% up to 90%

SOUND TRANSMISSION CHARACTERISTICS

Amplitude frequency response ± 0.4 dB 30 Hz to 15KHz
 Total harmonic distortion < than or = to 0.3%
 S/N (weighted) > than or equal to 62 dB
 Stereo cross-talk > than or equal to 40 dB
 Dual sound channel separation > than or equal to 60 dB

RF OUTPUT CHARACTERISTICS

Intermodulation < than or equal to -57 dBc
 Spurious & harmonic emissions meet or exceed all FCC & CCIR req

RF Output Connector/Impedance: 'N' fem for 500W mod, 7/8 for all others

CARRIER FREQUENCIES:

High spectral purity synthesized. Precision offset frequency capability with external reference frequency
 Frequency offset up to ±30 KHz, 25 Hz steps
 Internal reference stability <1PPM, 3 months

EXT. REFERENCE FREQUENCY INPUT

Level / Frequency 0.5V rms - 1V rms / 5 MHz

DATA OUTPUT

Serial data output standard / Baud rate: RS485 / 9600

Data available: FWD peak power, FWD average power, RFL peak power, RFL average power, Volt & Current Power supplies, Heat sink temperatures, Inlet air temperature, Temperature warning, Temperature alarm, VSWR, Excessive power alarm

Alarms & Protections: Overvoltage, Overcurrent, Overpower, Overtemperature, Excessive VSWR

AC Power Requirements

Nominal operating temperature range 220V ±15% (47 - 60 Hz)
 0° to +45° C

Model	1kWUHF	2kWUHF	2kWVHF	3kWVHF
AC Power	3.0 kVA	5.8 kVA	3.6 kVA	5.5 kVA
Consumpt.				
Width	483 mm 19"	483 mm 19"	483 mm 19"	483 mm 19"
Height	1800mm 71"	2083mm 82"	1800mm 71"	2083mm 82"
Depth	580mm 23"	580mm 23"	580mm 23"	580mm 23"
Weight	121 kg 266 lbs	230 kg 506 lbs	121 kg 266 lbs	230 kg 506 lbs