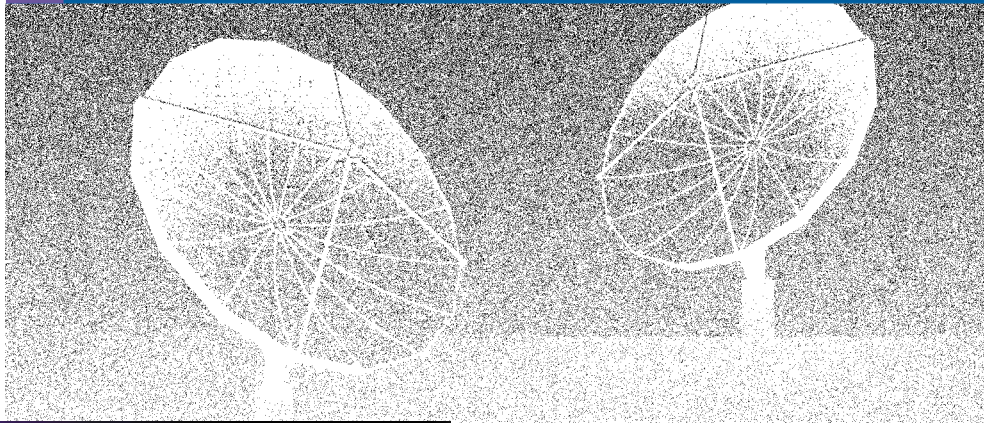




## Models 400C & 750C C-Band TWT Amplifiers



ETM's C-Band satellite uplink amplifiers packaged in a ruggedized five rack-unit enclosure have been designed specifically for the demands of fly-away, truck and other mobile applications. Easy to read displays allow the microprocessor control to clearly communicate detailed status and monitoring information. These ETM amplifiers combine the latest technology, ETM's 27 years of TWT experience, and design features based on in-the-field operation.

**Ease of Operation** is provided by a 20-character by 4-line fluorescent display and straight-forward four button control. Complete monitoring is provided including forward and reverse power, TWT voltages and currents, and operating temperatures.



*Modular design reduces cost of long-term maintenance.*

- In-The-Field Reliability** is ensured by ETM's rigorous testing program. Every ETM amplifier is subject to an environmental burn-in that includes temperature cycling, multiple cold starts from -20°C, and, as required, shock and vibration testing.
- Long Term Value** ETM backs these amplifiers with a full 2 year/9000 hour warranty designed specifically to benefit the satellite newsgathering professional. After the warranty period, ETM's easy to service modular power supply design and module trade-in program keep your maintenance costs low.
- Service, Service, Service** Every ETM product is backed by worldwide service provided 24 hours a day, 7 days a week. (800) 883-4ETM or outside North America: (510) 797-1100.

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## Specifications

<b>Frequency Range</b>	5.85-6.425 GHz (standard) Extended range optional
<b>Gain Variation</b>	4 dB max. 2 dB max. – optional
<b>Gain Slope</b>	.03 dB max. – over any 40 MHz
<b>Gain Stability</b>	.25 dB/24-hours – any frequency with constant drive
<b>Gain Adjustment</b>	0 – 35 dB – continuously adjustable
<b>Intermodulation Products</b>	-24 dBc at 7 dB backoff
<b>AM-to-PM Conversion</b>	6°/dB at rated power
<b>Harmonic Output</b>	-60 dBc
<b>Residual AM</b>	-50dBc to 4kHz max. 4kHz to 500kHz -20(1.15 + logF) (F in kHz) max. -85dBc above 500kHz
<b>Phase Noise</b>	meets limits 1 & 2 of IESS-308
<b>Noise and Spurious Outputs</b>	-65 dBW/4 kHz max.
<b>Group Delay</b> (in any 40-Mhz band)	Linear: .05 nSec/MHz Parabolic: .01 nSec/MHz (squared) Ripple: .50 nSec/MHz (peak-to-peak)
<b>Input VSWR</b>	1.20:1 max.
<b>Output VSWR</b>	1.25:1 max.
<b>Load VSWR</b>	1.50:1 max. – for spec. compliance 2.00:1 max. – continuous operation

## All Models

<b>RF Connectors</b>	Input: N-type; rear panel (SMA optional) Output: WR-137; rear panel Sample Port: N-type; rear panel (SMA optional)
<b>Metering</b>	Vacuum Fluorescent Display, 4-line, 20-character
<b>Monitored Parameters</b>	Forward Power (dBm, watts, graph), Reverse Power (dBm, watts, graph, % fwd pwr), Cathode Voltage, Helix Current, Filament Voltage, Filament Current, Collector Voltage, Cabinet Temperature (°C or °F), TWT Baseplate Temperature (°C or °F)
<b>User-Settable Warnings</b>	Over Forward Power, Under Forward Power, Over Reverse Power, Over Helix Current, Over Cabinet Temperature, Over Baseplate Temperature
<b>Altitude</b>	Up to 10,000 ft (derate 2°C/1,000 ft. above 3,000 ft.)
<b>Temperature</b>	Operating Temperature: 0° to 50°C Storage Temperature: -40° to 70°C
<b>Shock and Vibration</b>	Equal to Mobile Van or Antenna Pedestal
<b>Cooling</b>	Built-in forced air, rear intake and rear exhaust
<b>Interface</b>	RS-422/RS-485
<b>Certification</b>	Meets requirements of ETS 300-327

## 400 C

<b>Output Power at the Amplifier Flange</b>	400 watts, typical 350 watts, minimum
<b>Amplifier Gain</b>	60 dB min.
<b>A-C Power</b>	99 – 255 vac, single-phase, 50/60 Hz, 1800 VA
<b>Mechanical</b>	19" wide x 8.75" high x 24" deep, 83 lbs

## 750 C

<b>Output Power at the Amplifier Flange</b>	700 watts, minimum
<b>Amplifier Gain</b>	65 dB min.
<b>A-C Power</b>	99 – 255 vac, single-phase, 50/60 Hz, 2.5 kVA; 208, 240, 380 or 415 vac, 3-phase optional
<b>Mechanical</b>	19" wide x 8.75" high x 24" deep, 92 lbs



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