

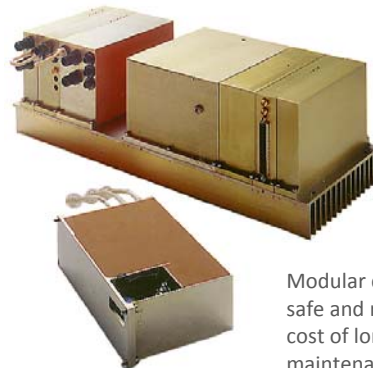


**Built To Last**

ETM's Ku-band satellite uplink amplifiers, packaged in ruggedized five rack-unit enclosures, have been designed specifically for the demands of fly-away, truck and other mobile applications. These amplifiers combine the latest technology, over three decades of ETM's TWT experience, and design features based on in-the-field operation.

**Simple, Low-Cost Maintenance**

ETM's modular power supply design simplifies maintenance and reduces downtime. Easy-to-access modules considerably improve MTTR and amplifier availability. Each high voltage module is completely encapsulated, safe, and isolated from other electronics.



Modular design is safe and reduces cost of long-term maintenance.

**Ease of Operation**

Detailed status and monitoring information is provided by a 20-character by 4-line fluorescent display and straightforward four-button control. Complete monitoring includes forward and reverse power, TWT voltages and currents, and operating temperatures.

**In-The-Field Reliability**

During ETM's rigorous testing program, every amplifier is subjected to an environmental burn-in that includes temperature cycling, multiple cold starts, and shock and vibration testing as required.

**Long Term Value**

ETM stands behind our amplifiers with a full two-year warranty. After the warranty period, ETM's easy-to-service and low cost modular power supply design reduces service time and helps 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.

### ELECTRICAL

Frequency:	13.75 – 14.50 GHz
Output Power at Flange:	700 watts min.
Amplifier Gain:	75 dB min. at rated power
Small Signal Gain Variation:	4 dB max. (across operating band)
Small Signal Gain Slope:	±0.03 dB / MHz max.
Gain Stability:	± 0.25 dB / 24-hours (after 30 min warm-up, constant drive and temp)
Gain Adjust Range:	0-35 dB (continuously adjustable)
Intermodulation:	-23 dBc max. at 7 dB backoff from total output power with two equal carriers
Spectral Regrowth:	Meets -26 dBc at 440 watts (Single, QPSK Digital Signal)
AM to PM Conversion:	6° / dB at rated power
Harmonic Output:	-80 dBc max.
Residual AM:	
Below 10 kHz:	-50 dBc
10 to 500 kHz:	-20 [1.3+LogF in kHz] dBc max.
Above 500 kHz:	-85 dBc
Phase Noise:	Meets Limits Part 1 & 2 of IESS-308
Noise and Spurious:	-65 dBW / 4 kHz max.
Group Delay (in any 40 MHz band):	
Linear:	0.05 ns / MHz
Parabolic:	0.01 ns / MHz (squared)
Ripple:	0.50 ns / MHz (pk-pk)
VSWR:	
Input:	1.50:1
Output:	2.00:1
Load:	1.50:1 (spec. compliance) 2.00:1 (continuous operation)
Primary Power:	
Voltage:	190-255 VAC, single-phase
Frequency:	50/60 Hz
Consumption:	2.5 kVA

### MECHANICAL

Dimensions:	19" W x 8.75" H x 24" L
Weight:	95 Pounds
RF Connectors:	
Input:	Type-N (f), rear panel
Output:	WR-75, rear panel
Sample Port:	Type-N (f), rear panel
Cooling:	Built-in forced air w/ integral fan

### ENVIRONMENTAL

Altitude:	Up to 10,000 ft (derate 2°C / 1,000 ft above 3,000 ft)
Temperature:	
Operating:	0° to 50°C
Storage:	-40° to 70°C
Humidity:	
Operating:	Up to 95% non-condensing
Non Operating:	Up to 100% non-condensing

Shock and Vibration: Normal Transportation

### MONITOR & CONTROL

Interface:	RS-422/485
Metering:	Vacuum Fluorescent Display 4-line, 20-character
Monitored Parameters:	Fwd Power (dBm, Watts) Rev Power (dBm, Watts, % fwd power) Cathode Voltage Helix Current Filament Voltage and Current Collector Voltage TWT Baseplate and Cabinet Temp
User-Settable Warnings:	Over / Under Fwd Power Over Rev Power Over Helix Current Over TWT Baseplate and Cabinet Temp

Note: Specifications subject to change without notice.

