

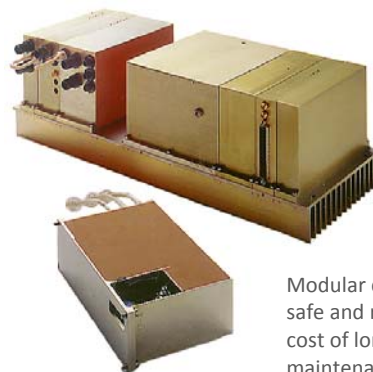


Built To Last

ETM's C-band klystron amplifiers, packaged in ruggedized rack mount or mobile enclosures, have been designed specifically for the demands of fixed site, transportable or vehicle-based applications. These amplifiers combine the latest technology, over three decades of ETM's klystron 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, klystron 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 for the life of your program. 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:	4.4 – 5.0 GHz
Output Power at Flange:	2,000 watts min.
Bandwidth (-1 dB):	10 MHz min.
Amplifier Gain:	65 dB min.
Spurious Output:	-65 dBc excluding \pm 200 kHz from the carrier
Harmonic Output:	-70 dBc max.
VSWR:	
Input:	1.25:1
Output:	1.25:1
Load:	2.00:1
Gain Adjust:	0-30 dB
Gain Stability:	\pm 0.25 dB / 24-hours at constant drive and temperature
Gain Slope:	\pm 0.05 dB / MHz max. over center 2/3 of instantaneous bandwidth
Residual AM:	
Below 4 kHz:	-40 dBc
4 to 500 kHz:	-20 [1.15 + logf] dBc max. (f is in KHz)
Above 500 kHz:	-85 dBc
AM to PM Conversion:	6° / dB at rated power
Primary Power:	
Voltage:	220/380 VAC \pm 10%, 3-phase
Frequency:	50/60 Hz \pm 6%
Consumption:	9.2 kVA
Primary Inrush Current:	Less than 200% of full load current with beam applied
Power Factor:	0.85 min.

MECHANICAL

Power Supply Dimensions:	19" W x 8.75" H x 22" L
RF Chassis Dimensions:	19" W x 26.25" H x 21" L
Weight:	500 lbs max.
RF Connectors:	
Input:	Type-N (f), 50 Ohms
Output:	CPR 187 Rectangular
Sample Port:	Type-N (f), 50 Ohms

ENVIRONMENTAL

Altitude:	Up to 10,000 ft (derate 2°C / 1,000 ft above 3,000 ft)
Temperature:	
Operating:	10° 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:	As defined in MIL-STD 810E, method 514.5, Annex C (Figures 514.5 C-1, 3, 7, 9, 10, and 15)

MONITOR & CONTROL

Interface:	RS-485
Metering:	Vacuum Fluorescent Display 4-line, 20-character
Monitored Parameters:	Fwd Power (dBm, Watts) Rev Power (dBm, Watts, % fwd power) Input Line Voltage Body Current Cathode Voltage Filament Voltage and Current Klystron, Power Supply & Cabinet Temp Klystron (High Voltage) Arc Interlock and Panel Open
User-Settable Warnings:	Over / Under Fwd Power Over Rev Power Body Over Current Over Klystron and Cabinet Temp

Note: Specifications subject to change without notice.

