



Ku-Band

TRAVELING WAVE TUBE POWER AMPLIFIERS

FOR SATELLITE UPLINK APPLICATIONS



MT2300
Powers:
 200W
Dimensions:
 8.9" [226.1mm] H
 9.1" [231.6mm] W
 18.3" [465.3mm] L
Weight:
 33 lbs. (15.0kg) nominal

MT3200A/MT4000
Powers:
 400W, 750W
Dimensions:
 5.25" [134.0mm] H (MT3200A)
 7.0" [178.0mm] H (MT4000)
 19.0" [483.0mm] W
 24.0" [610.0mm] L
Weight:
 (MT3200A)
 65 lbs. (29.5kg) nominal
 (MT4000)
 75 lbs. (34.0kg) nominal

MT3400
Powers:
 400W
Dimensions:
 9.6" [244.0mm] H
 11.8" [300.0mm] W
 20.6" [522.0mm] L
Weight:
 65 lbs. (29.5kg) nominal

MT4400
Powers:
 750W, 1.25kW PK
Dimensions:
 11.9" [304.0mm] H
 14.3" [364.0mm] W
 23.1" [588.0mm] L
Weight:
 84 lbs. (38.0kg) nominal

AVAILABLE SYSTEM OPTIONS:

- 1 + 1 Redundant System
- 1 + 2 Redundant System
- Phase Combined, Single and Dual Path Redundant Systems
- Other Configurations Available Upon Request

AVAILABLE AMPLIFIER OPTIONS:

- L-Band Block Upconverter
- Switchover Control
- Linearizer
- Mounting Configurations
- Remote Controller
- Hand-Held Local Controller
- Ethernet Interface
- Chassis Color (Antenna Mount Only)
- Other Options Available Upon Request

Ku-Band TWTA FEATURES:

- Rugged Construction
- Calibrated RF Output Monitor
- Dual Communications Interfaces
- Continuous RF Attenuator Adjustment in 0.1 dB Steps
- Automatic Output Power Control
- Output Power Reported on the Communication Interfaces
- Extensive Diagnostic Capability
- Time Stamped Event Log
- Automatic Filament Shutdown
- Industry-Leading Operating Temperature Range

ISO 9001



Ku-Band

SPECIFICATIONS

Installation	Indoor			Outdoor		
	MT3200A	MT4000	MT2300	MT3400	MT4400	
Electrical Specifications						
Frequency (GHz)	12.75-14.5 13.75-14.5		13.75-14.5	12.75-14.5 13.75-14.5		13.75-14.5
TWT Power	400W CW	750W CW	200W CW	400W CW	750W CW	1.25 kW Peak
*HPA Rated Peak Power	N/A	N/A	N/A	N/A	N/A	*1.07 kW Peak
HPA Max CW (Flange)	N/A	N/A	N/A	N/A	N/A	500W CW
*HPA Rated CW (Flange)	360W CW	665W CW	178W CW	360W CW	665W CW	N/A
IM3 with Linearizer	-27dBc	-27dBc	-27dBc	-27dBc	-27dBc	-27dBc
At 4 dB TPBO	At 145W	At 265W	At 71W	At 145W	At 265W	At 426W
IM3 without Linearizer	-18dBc	-18dBc	-18dBc	-18dBc	-18dBc	-27dBc
At 4 dB TPBO	At 145W	At 265W	At 71W	At 145W	At 265W	At 426W
Environmental Specifications						
Operating Temperature	-10°C to +50°C	0°C to +50°C	-40°C to +50°C	Standard: -40°C to +50°C Optional: -40°C to +60°C		
	(derate by 1.9°C per 1,000 ft. above sea level)					
Non-Operating Temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-50°C to +70°C		
Relative Humidity	95% Non-Condensing	95% Non-Condensing	100% Condensing	100% Condensing		
Operating Altitude	10,000 ft. above sea level (3,048m)					
Non-Operating Altitude	50,000 ft. above sea level (15,240m)					
Vibration	MIL-STD-810E, Method 514.4, Proc. 1, Cat. 1					
Shock	10g, 11 ms half sine					
Mechanical Specifications						
RF Connectors	Input: SMA Female Output: WR-75F			Input: Type-N Female Output: WR-75G		
Cooling	Forced air, 2.0" clearance required					
Acoustic Noise	<68 dBA max. at 1 meter					
Air Flow	100 CFM	190 CFM	72 CFM	150 CFM	250 CFM	
Physical Specifications						
Dimensions	5.25" H x 19.0" W x 24.0" L (134mm x 483mm x 610mm) 3RU 19 inch rack mount	7.0" H x 19.0" W x 24.0" L (178mm x 483mm x 610mm) 4RU 19 inch rack mount	8.9" H x 9.1" W x 18.3" L (226mm x 231mm x 465mm)	9.6" H x 11.8" W x 20.6" L (244mm x 300mm x 522mm)	11.9" H x 14.3" W x 23.1" L (304mm x 364mm x 588mm)	
Installed Weight	65 lbs. nominal (30 kg)	75 lbs. nominal (34 kg)	33 lbs. nominal (15 kg)	65 lbs. nominal (30 kg)	84 lbs. nominal (38 kg)	

*Used to calculate Total Power Back-off (TPBO) Start Point.

Note: Performance information is subject to change without notification. Contact MCL for the latest specifications.