



DBS-Band

TRAVELING WAVE TUBE POWER AMPLIFIERS

FOR SATELLITE UPLINK APPLICATIONS



MT4000

Powers:

500W, 750W

Dimensions:

7.0" [178.0mm] H

19.0" [483.0mm] W

24.0" [610.0mm] L

Weight:

75 lbs. (34.0kg) nominal



MT4400

Powers:

500W, 750W

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 (MT4400)

Other Options Available Upon Request

DBS-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



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SPECIFICATIONS

Installation	Indoor		Outdoor	
Model	MT4000		MT4400	
Electrical Specifications				
Frequency (GHz)	17.3-18.4			
TWT Power	500W CW	750W CW	500W CW	750W CW
*HPA Rated Peak Power	N/A	N/A	N/A	N/A
HPA Max CW (Flange)	N/A	N/A	N/A	N/A
*HPA Rated CW (Flange)	420W CW	630W CW	445W CW	665W CW
IM3 with Linearizer	-26dBc	-26dBc	-26dBc	-26dBc
At 4 dB TPBO	At 165W	At 250W	At 180W	At 265W
IM3 without Linearizer	-17dBc	-17dBc	-17dBc	-17dBc
At 4 dB TPBO	At 165W	At 250W	At 180W	At 265W
Environmental Specifications				
Operating Temperature	0°C to +50°C	0°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		-50°C to +70°C	
Relative Humidity	95% Non-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-62F		Input: Type-N Female Output: WR-62G	
Cooling	Forced air, 2.0" clearance required			
Acoustic Noise	<68 dBA max. at 1 meter			
Air Flow	190 CFM		250 CFM	
Physical Specifications				
Dimensions	7.0" H x 19.0" W x 24.0" L (178mm x 483mm x 610mm) 4RU 19 inch rack mount		11.9" H x 14.3" W x 23.1" L (304mm x 364mm x 588mm)	
Installed Weight	75 lbs. nominal (34 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.