

## FEATURES

- ▶ 500W for Higher Data Rate Capability
- ▶ Industry Leading Efficiency with 2.4 KVA for 500 Watts of Output Power
- ▶ High Reliability Lowers Life Cycle Cost
- ▶ Rugged 85 Lb Package
- ▶ Mounts on Antenna for Simple Integration
- ▶ Redundancy and BUC Options Available



The 500W SSPA takes high efficiency to a new level in solid-state power amplifiers. Wavestream's proprietary spatial power combining enables packing 500 Watts into a rugged 85-lb. unit that can be mounted directly on medium aperture antennas, maximizing the power into the feed and further enhancing system-level efficiency.

The compact 24" x 12" x 8" SSPA provides the required linearity for troposcatter links. It provides high reliability to minimize life cycle costs even in the most demanding applications and extreme environments (- 40°C to + 60°C).

# C-Band Solid-State Troposcatter Amplifier

# 500W

## RF Specifications

Transmit Frequency	4.4 - 5.0 GHz
Small Signal Gain	35 dB nominal
P <sub>1</sub> dB Output Power	57 dBm
Rated Output Power	57 dBm
Intermodulation with two equal carriers at 6 dB total power backoff from rated power	-31 dBc
Spectral Regrowth (typical) at 2 dB below rated power at 1.0x symbol rate offset for OQPSK or QPSK	-30 dBc
Output Spurious	-60 dBc
AM/PM Conversion up to rated power	2.5 deg/dB

## Power

AC Power	200 - 240 VAC, 50-60 Hz
AC Prime Draw (typical) At rated power output	2.2 KVA

## Interfaces

Input Port Connector	Type N Female
Input Port Impedance	50 Ohms
RF Sample Port	Type N Female
RF Port Connector	WR-187
RF Output VSWR	1.25:1 max
AC Connector	4-Pin Circular
M&C Connector	19-Pin Military Circular
Monitor and Control	Serial RS-485 (SA-bus), Forward Power Monitor

## Physical

Size	24" L x 12" W x 8" H
Weight	85 lbs
Operating Temperature	-40°C to +60°C

## Base Model Number

MHA-CTR500

## The Wavestream Advantage:

- Higher output power with less energy usage.
- Compact product footprint to meet critical space and weight limitations.
- Proven reliability and efficiency.
- Reduced lifecycle maintenance costs.



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