



Product Brochure

# Aerostream™ 1500W KPSU Power Supply

WP00-1K5A10

## Field-Proven Performance

Wavestream's Aerostream™ Ku/Ka Power Supply Unit (KPSU) offers unmatched efficiency and performance for the challenging airborne environment. Aerostream™ products meet the requirements of RTCA/DO-160G, and ARINC specifications for commercial aircraft as well as MIL-STD requirements for military aircraft.

## Features

- Airborne Qualified ARINC 836/792 Form Factor
- Designed for a Pressurized Environment
- Two Independent and Isolated 48V Supplies
- Fan and Fanless Cooling Options Available

## Wavestream Advantages

What sets Wavestream products apart from traditional amplifier solutions is the innovative Spatial advantEdge™ technology. This unique patented technology allows for generation of higher output power in more efficient, and more compact product packages that are more reliable. Wavestream products are optimized for Linear operation, drawing less power when backed off to help save valuable energy resources. They generate less heat, and have superior heat sinking ensuring a higher Mean Time Between Failures (MTBF) for greater reliability and lower lifecycle maintenance costs.

## Benefits

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



Aerostream™  
1500W KPSU Power Supply

## Technical Specifications

### Power Specifications

**AC Power:** 115 VAC 3-Phase

**AC Frequency:** 360-800 Hz

**DC Power (Output):** 1500W  
(max)

**DC Voltage (Output):** Two  
Independent and Isolated 48V  
Supplies

**DC Load Regulation:** +/- 1V

**DC Ripple:** < 200 mV

**Power Factor:** ≥ 0.98, Lagging

**Efficiency:** ≥ 90 %

**Power Holdup:** 30 ms at 1350 W

#### Protection:

- Over Voltage
- Over Current
- Short Circuit
- EMI Filtering
- Lightning Protected

### Physical

**Size:** 18.0" L x 9.1" W x 3.51" H  
(46.0 x 23.0 x 8.2 cm)

**Form Factor:** ARINC 836/792

**Weight:** 20.0 lbs (9.1 kg)

**Cooling:** Forced Air, or Fan  
Option

**Cooling Duct/Spud:** ARINC  
A791, AS5131B36 Fitting

#### Operating Temperature

**(Ambient Air):** 5° F to +158°F  
(-15° C to +70° C)

#### Relative Humidity:

100% Condensing

#### Shock & Vibration:

DO-160G, MIL-STD-810

#### Altitude:

15,000 ft above sea level  
(operating)

### Interfaces

**Input Power:** 5-pin MIL Circular  
Aircraft Interface/M&C: 19-pin  
MIL Circular, Ethernet, Discrete  
Keyline

**Tx Antenna Power:** Keyed, 10-  
pin MIL Circular

**Rx Antenna Power:** 10-pin MIL  
Circular

### Options

Fan Version

#### Base Model

WP00-1K5A10

## About Gilat Wavestream

Gilat Wavestream sets the standard in the design and manufacture of next generation high power solid state amplifiers. Wavestream's Family of Ka, Ku and X-band Solid State Power Amplifiers (SSPAs), Block Upconverters (BUCs) and transceivers provide systems integrators with field-proven, high performance solutions designed for ground mobile and fixed, gateway and airborne satellite communication systems worldwide.

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