

CASE STUDY:

REVOLUTIONIZING THE AVIONICS INDUSTRY WITH UNIQUE POWER SOLUTIONS

AT A GLANCE

Requirements

- ✓ Nominal input voltage of 115 VAC and frequency of 400 Hz
- ✓ Compliance with the stringent guidelines outlined in DO-160G
- ✓ Operation across a wide temperature range from -55°C to +70°C
- ✓ High efficiency, power factor correction, and output voltage limits
- ✓ Remote voltage control capability
- ✓ Thermal protection functionality
- ✓ Compliance with industry standards for electromagnetic compatibility and safety

Benefits

- ✓ Leverage proven technology from a wide range of Astrodyne TDI aerospace products
- ✓ Power under voltage circuit protection to prevent the power supply from drawing excessive input current
- ✓ Protection against temperature extremes
- ✓ Minimum efficiency of 85% at full rated load

OVERVIEW

Today's aircraft are equipped with high-speed connectivity services. Whether you're on a corporate jet, a commercial flight, or on a specialized mission, we've got you covered. Astrodyne TDI has partnered with leading avionics manufacturers to develop cutting-edge satellite connectivity solutions, ensuring lightning-fast internet access wherever your travels take you.

POWER CHALLENGES

Astrodyne TDI designed a power supply unit for avionics technology with a 115 VAC input voltage and 400 Hz frequency. It complies with DO-160G Section 16, ensuring optimal performance during startup and stable power distribution. The unit operates from -55°C to +70°C, prioritizing efficiency and reliability. Advanced features include remote voltage sense, thermal protection, and compliance with industry standards for safety and electromagnetic compatibility, ensuring dependable avionics system operation.

ASTRODYNE TDI'S SOLUTION

By customizing existing power technology to meet the requirements of top avionics companies, Astrodyne TDI has set new standards for power supply solutions in aerospace. With a focus on efficiency, reliability, and compliance with industry standards, their collaboration with leading avionics firms continues to drive advancements in aircraft technology. As we soar into the future of aviation, the partnership between Astrodyne TDI and avionics manufacturers promises to deliver even more groundbreaking solutions, ensuring seamless connectivity and operational excellence in the skies. Stay tuned for more exciting developments in the world of aircraft power solutions.

