

EMI FILTERS
POWER SUPPLIES

ELECTRONIC CONTROLS

FOR MILITARY & AEROSPACE



POWER SUPPLIES • EMI FILTERS • ELECTRONIC CONTROLS













POWER SUPPLIES • EMI FILTERS • ELECTRONIC CONTROLS











There Is No Substitute for Proof in Performance.

As a trusted partner to military and aerospace contractors who provide key subsystems for mission- and life-critical applications, the Astrodyne family of brands has an exemplary track record of exceeding customer expectations.

EMI FILTERS



Astrodyne is a uniquely integrated company that offers advanced design, engineering, manufacturing, testing and technical support to achieve the optimal balance of quality, performance and cost-efficiency.

For more than two decades, our LCR Electronics, Radius Power and Filter Concepts teams have designed and manufactured a complete range of AC and DC EMI and RFI filters to help customers meet MIL-STD-461, RTCA/DO-160, MIL-STD-810, MIL-PRF-15733, UL 1283 and other EMC requirements.

Our custom and standard filters for military, aerospace and TEMPEST applications span all current and voltage ratings with input frequencies ranging from 47 to 880 Hz, and can be supplied with various levels of transient voltage protection.

Rugged MIL-COTS Filters – Our complete range of mil/aero AC and DC EMI/RFI filters satisfy MIL-SPEC and other stringent EMC standards.

MIL-STD-461 EMI Filters – Easily pinpoint your best solution for EMI circuit applications with our customizable EMI filters for MIL-461 applications.

EMP/HEMP Filters – Our power line filters meet MIL-STD-188-125-1 point-of-entry requirements for short and intermediate pulses. High transient suppressors in front of the inductive input circuit provide low residual currents during an EMP pulse and protect the connected equipment.

Facility/Shielded Room Power Line Filters – These filters are designed with 100 dB attenuation (insertion loss) from 14 KHz or 100 KHz to 10 GHz, measured in accordance with MIL-STD-220.

Data/Communication/Control Line Filters – Access our versatile F15000 Series filter inserts and enclosures for telephone line, data line and control line filtering.

Tubular Filters – Achieve excellent high-frequency performance with our 14000 Series tubular filters featuring high-quality feed-through capacitors.

Comprehensive testing and analysis - including two fully equipped EMC test chambers — enable us to quickly and cost-effectively bring your products into compliance.



Our experienced EMI/RFI filter design engineers and EMC testing personnel build confidence in high-reliability performance — for both COTS and custom solutions.

Our engineering department can assist you with any facet of EMC performance:

- Problem Analysis and Assessment
- EMI and RFI Filter Design and Development
- EMC Testing to MIL-STD-461, MIL-STD-220, TEMPEST and Other Standards
- Product Evaluation and Pre-Compliance Testing
- EMC Consulting Services

POWER SUPPLIES







Our AS9100C/ISO 9001:2008 certified facilities help ensure the product reliability and quality required for the most demanding environments.

With an extensive portfolio that has been 50 years in the making, Astrodyne's RO Associates and Jerome Industries AC/DC and DC/DC power converters address the most challenging performance requirements. Our standard and modified standard products for military, aerospace and medical applications support mission-critical requirements with compliance to MIL-STD-461, MIL-STD-704, MIL-STD-1275, MIL-STD-1399, RTCA/DO-160 and EN60601-1.

Our power converter products are manufactured in ISO 9001:2008, AS9100C and ISO 13485 certified facilities.

AC/DC and DC/DC COTS Brick Power Supply Modules – Rated from 180 to 1,000 W, Astrodyne's AC/DC PFC brick front end products support wild AC input frequencies from 47 to 880 Hz. Our DC/DC converters, rated from 50-700 W, support traditional 28, 48 and 300 VDC inputs, and a wide range of DC input voltages from 9 to 36 V or 18 to 75 V, while providing exceptional demonstrated MTBF rates.

Meet Conducted Emissions Standards – Available filter modules support MIL-STD-461, RTCA/DO-160 and CISPR conducted emissions and total harmonic distortion (THD) limits.

Compatible with MIL-STD-810 Specifications – Our power supplies conform to military and aerospace avionics transient, EMC and shock and vibration standards.

Variety of Configurations – Astrodyne offers full-brick, three-quarter brick, half-brick, quarter-brick and eighth-brick formats.

Exceptional, Proven MTBF – Reliability is delivered through key design features such as insulated metal substrates, planar magnetics, thermally conductive potting and conformance with NAVSO P-3541A design guidelines.

Broad Operating Temperature – Options span from -55° C to $+100^{\circ}$ C baseplate temperatures with no derating.

Our high-reliability encapsulated power converters are frequently chosen for high-performance, high-power density systems in COTS military power system designs. Their resistance to shock and vibration, electrical efficiency and superior thermal designs make them ideally suited for extreme or harsh thermal environments, including closed box applications with high ambient temperatures or limited airflow.

Typical AC/AC and DC/DC power supplies for military and aerospace avionics applications include in-flight entertainment systems, galley systems, seating systems, SatCom systems, radar systems and systems used in unmanned environments.

ELECTRONIC CONTROLS



Astrodyne power management and distribution solutions are constantly evolving to keep pace with our customers' needs and changing technologies, including:

- PDUs Designed to MIL-STD-1399, -704, -810 and -461
- · Power and Thermal Monitoring
- 1U Increment or Custom Sizes
- Integrated EMI Filtering

Through our expertise in PWM and phase cut motor drives, we provide the ability to control speed, torque, position, efficiency, power quality and safety in a broad range of motor types, from sub-fractional to 2 HP:

- Brushless (BLDC)
- Brush
- Steppe
- AC Induction (three-phase)

The Power of Astrodyne.

Power-up with our expanded technologies, engineering support and global manufacturing. The addition of the RO Associates, Jerome Industries, LCR Electronics, Radius Power and Filter Concepts brands to the Astrodyne family has expanded our extensive line-up of standard and custom solutions. We've long been known for our experience, personal service and creative thinking...now you'll find even more ways to help you solve your demanding power challenges.



Our experience with compatibility (EMC) standards and high reliability power conversion products provides the insight to support compliance across a variety of military, aerospace, medical and commercial requirements.











Astrodyne Corporate Headquarters 375 Forbes Boulevard, Mansfield, MA 02048 T. 508-964-6300 • F. 508-339-0375

LCR Electronics, Inc.

9 S. Forrest Avenue, Norristown, PA 19401 T. 800-527-4362 • T. 484-704-2700 • F. 484-322-2396

Radius Power, Inc.

22895 East Park Drive, Yorba Linda, CA 92887 T. 714-289-0055 • F. 714-289-2149

Jerome Industries Corp. 730 Division Street, Elizabeth NJ, 07201 T. 908-353 5700 • F. 908-353-1021

RO Associates 4040 Clipper Court, Fremont, CA 94538 T. 508-964-6300 • F. 508-339-0375

www.astrodyne.com



POWER SUPPLIES • EMI FILTERS • ELECTRONIC CONTROLS











