

## High-Reliability Power Supplies



Delivering mission-critical power and support to a wide range of demanding electronic systems used in airborne, shipboard, ground and space-based platforms.

**EXCELITAS®**  
TECHNOLOGIES



Keeping Our Troops Safe  
with 50 years of Unequaled  
Experience Supporting  
Mission-Critical Programs



## We Provide Power Solutions that Enable the World's Most Advanced Smart Defense Systems.

### Providing Mission-Critical Power

Excelitas is a leader in the design and manufacture of high-reliability power supplies. Our products provide mission-critical power to a wide range of demanding electronic systems used in airborne, shipboard, ground and space-based platforms.

Our power supplies are designed and manufactured to meet the most stringent customer specifications and the harshest defense environments including survival in natural and man-made radiation environments.

Excelitas supports many critical Defense applications including:

- Communication, Navigation & Identification (CNI) Systems
- Missile Systems
- Countermeasure Systems
- GPS
- Radar Systems
- Engine Control Systems
- Illumination Systems
- Fire Control Systems

### Meeting the Highest Performance Standards

Excelitas' power systems meet the highest industry performance standards:

- Quality: AS9100/ISO 9001
- Continuous Improvement: Lean & 6 Sigma
- Solder & Workmanship: J-STD-001 & IPC-610 certified operators and inspectors
- ESD Controls: ANSI/ESD S20.20 & MIL-STD-1686
- Environmental Health & Safety: OHSAS 18001; ISO 14001
- Commercial Aircraft Electrical Standards: DO 160
- Other Military Standards, IPC Standards and ANSI Standards

Today's advanced defense and aerospace applications demand a partner that will provide the technology and expertise to get the job done right the first time. We have decades of experience providing custom designs, Commercial Off The Shelf (COTS) and Military Off The Shelf (MOTS) modules, build-to-print and depot repair services. When it comes to mission-critical performance, reliability and support, Excelitas delivers it all.



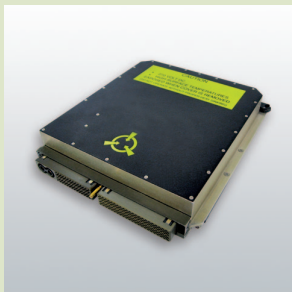
# A Full-Range of Power Capabilities for Your Demanding Requirements



## AC-DC Rectifiers

Excelitas provides a full range of AC-DC converter capabilities:

- TRUs/ Lightweight TRUs: Multiphase transformer-rectifier units (TRUs) convert three-phase power to bulk DC while reducing line current harmonics to less than 3%. 50/60 Hz versions for naval and ground applications. Lightweight 400/800 Hz versions for airborne applications. Power ratings from 1 kW.
- 3-Phase Power Factor Correction: An all-electronic alternative to TRUs, providing higher packing density and lighter weight. Power ratings from 1 kW.
- High Power Rectifier Units: Very efficient, simple and light-weight units which convert three-phase input power to bulk DC power and provide on/off control and protection features. Typically rated 10 to 100 kW.
- Switch-Mode Power Supplies: A full range of switch-mode power supplies ranging from 100 watts to 5000 watts, with or without power factor correction.



## DC-DC Converters

Excelitas provides a full range of DC-DC converter capabilities:

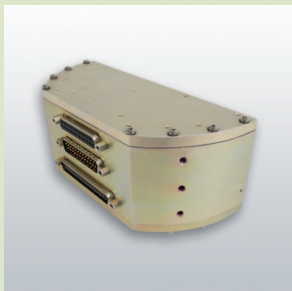
- COTS Bricks – LC810 Product Line: Single and multiple output converters in industry-standard full-brick format designed for severe environments. 28Vdc and 155/270 Vdc nominal input voltages. Output power up to 150 watts.
- MOTS Bricks – HDPC Product Line: DC-DC converters similar to LC810, but using hermetic full-MIL semiconductors.
- VME and SEME Power Supplies: A full range of multi-output converters that can be powered from 28VDC and 270VDC.



## Unique Power Solutions

Excelitas provides many unique power configurations to meet your most challenging needs.

- Pulsed Power: Designed specifically for pulsed applications such as RADAR transmit modules. Provides extremely fast transient response so that the traditional bulk capacitor may be eliminated from the system design. Excelitas also supplies a linear finishing regulator to switch the power into a RADAR transmit module.
- Uninterruptible Power Systems (UPS): Single and three-phase input. Designed for rugged naval and aerospace environments.
- Optoelectronic Systems: Visible and IR illuminators and power supplies. 20 watts up to 6000 watts.
- EMI Filters: For DC, single-phase AC and three-phase AC inputs; 10 to 5000 watts. Enables systems to meet conducted emission and susceptibility requirements of MIL-STD-461 and DO-160.



## Custom Power Supplies

Excelitas specializes in creating custom power solutions for the most demanding requirements:

- Low Noise
  - High Density
  - Custom Form Factors
  - Multiple Outputs
  - Digital Control Loops
  - Digital Interface
  - Extreme Environments
  - AC or DC Inputs
- Excelitas Power Systems' experienced engineering team can provide solutions to other unique power needs:
- Excelitas has a significant inventory of standard converter designs that are readily adaptable to your unique power needs.
  - The Excelitas Power Systems team can utilize other Defense team centers of excellence in Energetic Systems, Sensors, CCD Cameras, LEDs and Lighting to create high performance systems.

## Power Services

### Depot Repair Services

Our depot service provides fast and reliable services for a large variety of power systems regardless of the original manufacturer. The dedicated Depot team can execute quickly and get vital equipment back in service. With a fully staffed Test and ESS department, full engineering support, an AS9100B Quality System and a dedicated customer support representative, you are assured the highest levels of service and quality.

### Build-to-Print

Excelitas can support your build-to-print needs. Our lean production can provide the low cost solution you desire, but with the high levels of quality and service required for your product. As power solutions experts, we can offer you a better value than contract manufacturers. We provide full engineering support including proactively addressing obsolescence through our robust Diminishing Manufacturing Sources (DMS) process. Our expertise in supply chain management and our vertically integrated manufacturing will assure that we meet your delivery requirements with the shortest possible lead-time.

Excelitas Technologies offers a comprehensive line of mission-critical Defense & Aerospace solutions to keep our troops safe on the ground, in the water, and in the air.



### About Excelitas Technologies

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high-performance technology needs of OEM customers.

From aerospace and defense applications to medical lighting, analytical instrumentation, clinical diagnostics, industrial, and safety and security applications, Excelitas Technologies is committed to enabling our customers' success in their specialty end-markets. Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

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