

# Power Supplies

## IFEC Systems



**Pascal**

# Reliable Airborne Power

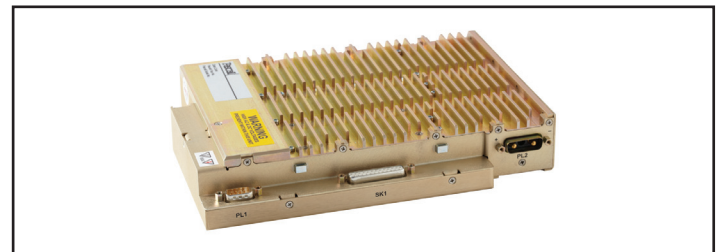
## In-Flight Entertainment and Connectivity Leader

Pascall is well renowned within the aerospace industry for producing high performance and high reliability cabin and electronics bay power solutions. Our products are currently used in applications such as seat boxes, media file servers, satcom antennas, passenger display screens, direct broadcast satellite TV, cellular phone communications & USB charging for portable electronic devices, with high power capability.

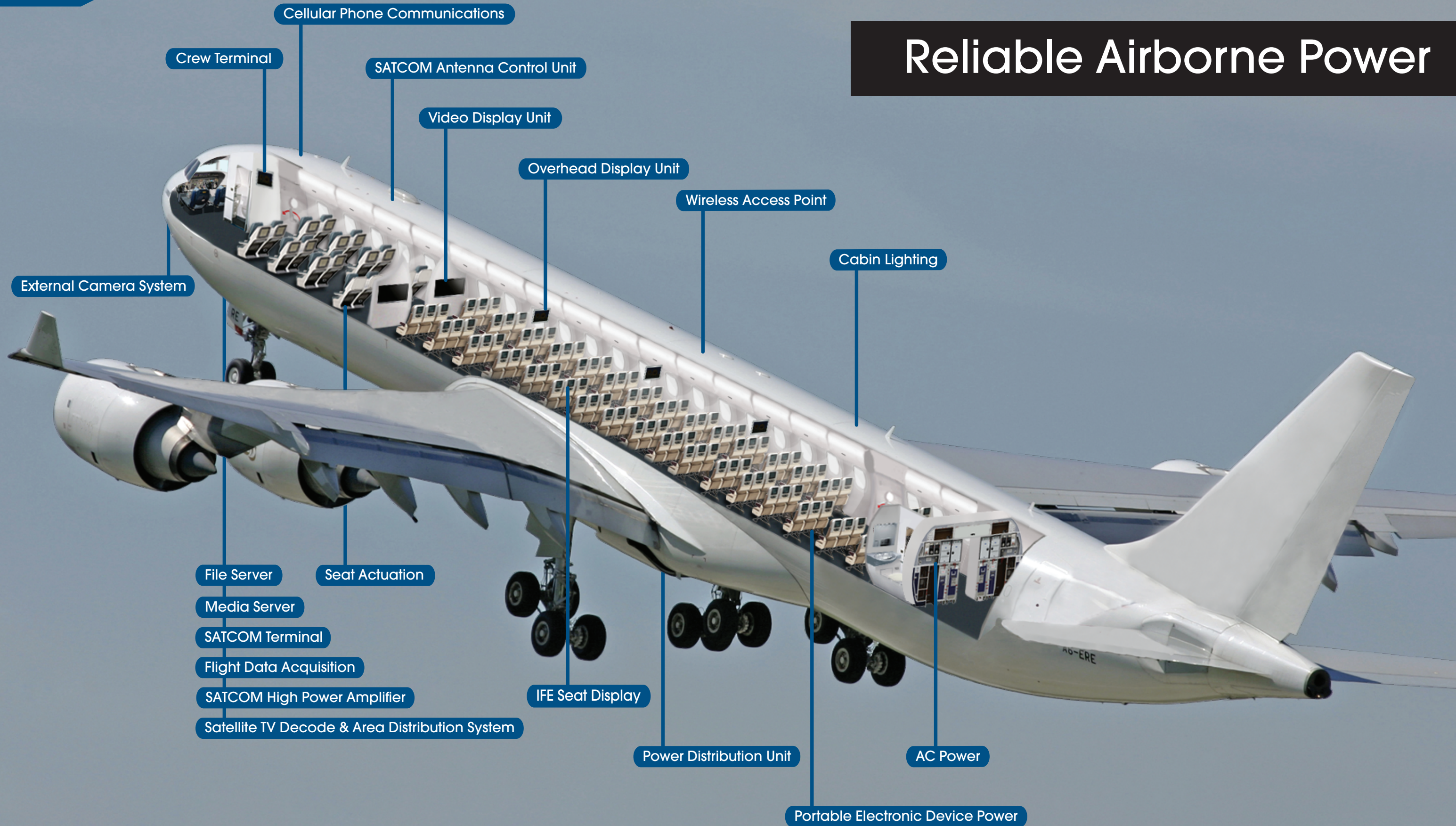
## Products and Power Supply Solutions

Pascall offers reliable, field-proven custom "fit and forget" solutions for In-Flight Entertainment and Communications platforms:

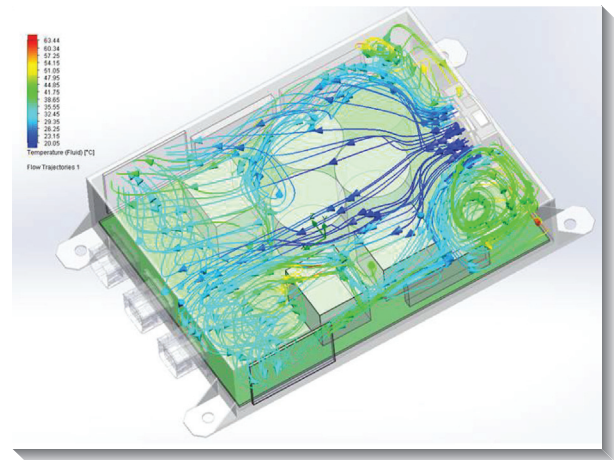
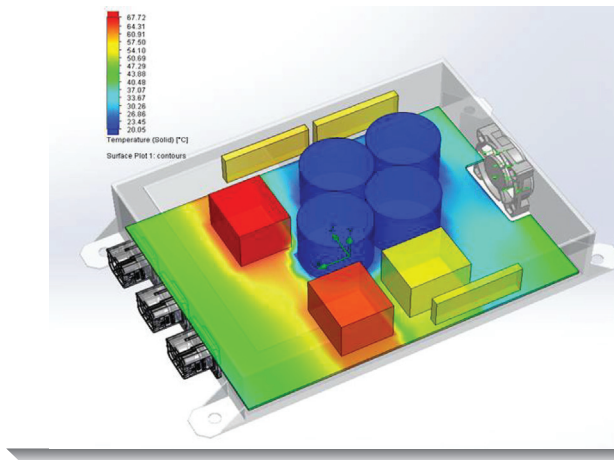
- Line Replaceable Units (LRUs), integrated assemblies (embedded or stand-alone), and embedded power supplies.
- Power ranges from 10 watts through to several kilowatts.
- Inputs of 115VAC, fixed or variable frequency, 28VDC or dual 115VAC/28VDC.
- Outputs designed to specific customer requirements.
- Additional battery or capacitor backup capability can be built for extended holdup time beyond the nominal 200 milliseconds.
- Environmental design capabilities provide full conformance to RTCA-DO-160 requirements, Airbus and Boeing specifications; including the latest wild frequency (360Hz - 800Hz) specification, and composite bodied aircraft requirements.
- The convergence of direct broadcast satellite television, communications, and connectivity into the IFE arena, our extensive knowledge and capability in IF, RF, and Microwave signal processing has facilitated enhanced customer solutions in the civil aerospace market.
- From DBS TV multiplexer units, gate-link applications and GSM cellular phone interfacing, we are carrying this capability forward to support the Wi-Fi, Wi-Max & 3G/LTE products of the future.



# Reliable Airborne Power



# Capabilities & Services



## Design Capabilities

- AC to DC Converters Single and Three Phase
- DC to DC Converters
- Custom Discrete Designs
- Typical Power Range 10W to 4KW
- Insulated Metal Substrate (IMS) Thermal Management
- Multiple Outputs
- Active Power Factor Correction
- Battery/Capacitor Backup
- High Vibration/Shock Environments
- Motor Controllers
- Temperature -55°C to +100°C
- RTCA-DO-160 Current Harmonics
- EMI Filter Design
- Compliance with Military Standards (MIL-STD's 704, 461, 810, 1275 and DEF-STAN 59-41)

## Engineering Services

- Electronic Design
- Mechanical Packaging
- MTBF Prediction and FMEA/FMECA
- Circuit Board Design
- Thermal Simulation
- Mechanical Simulation
- Extensive Engineering Laboratory
- HALT Testing
- Temperature Testing
- Conducted EMI Testing
- Qualification Testing: Electrical, EMI & Environmental



DDC Electronics, Ltd. specialises in the design and manufacture of power supply solutions for extreme environments. With over 30 years of experience in the defence, aerospace and industrial sectors, we are a trusted source for complete solutions in the design, development and manufacture of electronic power conversion products – from single converters to complex multi-function conversion systems. Our products are the first choice for power... with IFEC systems, as we have had more than 165,000 power supply units installed on commercial aircraft... with defence systems, as they are in service with Ground, Air and Naval forces across the world, powering state of the art electronic systems... and trusted by industry leaders to deliver reliable proven performance in some of the most challenging environments to be found anywhere.

*XCEL and Pascall are Brands of DDC Electronics, Ltd., a subsidiary of Data Device Corporation*



DDC is a world leader in the design and manufacture of high-reliability Connectivity, Power and Control solutions (Data Networking; Power Distribution, Control and Conversion; Motor Control and Motion Feedback) for aerospace, defense, and industrial applications. With awards for quality, delivery, and support, DDC has served these industries as a trusted resource for more than 50 years... providing proven solutions that are optimized for efficiency, reliability, and performance. Data Device Corporation brands include DDC, Beta Transformer Technology Corporation, National Hybrid Inc., Pascall Electronics Ltd., and XCEL Power Systems Ltd. DDC is headquartered in Bohemia, NY and has manufacturing operations in New York, California, Mexico, and the United Kingdom.

## Connectivity

### Data Bus Solutions

DDC is the market leader in high reliability data bus solutions for MIL-STD-1553/1760, ARINC 429, Fibre Channel, Ethernet, CANbus, Serial I/O and other protocols, and is one of the few companies able to provide a full range of computers, boards, hybrids and ASIC solutions for aerospace, defense and space applications.

## Power

### Power Supplies

DDC supplies high specification power products to the aerospace, defence, maritime and satellite communications industries.

### Solid-State Power Controllers

DDC's programmable solid-state power controllers provide simple and reliable power management for aerospace and defense systems.

## Control

### Motor Controllers and Drives

DDC is the world leader in high reliability torque, speed, and position controllers and drives engineered to operate in demanding environments.

### Motion Feedback

DDC is the world leader in the design and manufacture of Synchro/Resolver-to-Digital and Digital-to-Synchro/Resolver converters.



The information in this brochure is believed to be accurate; however, no responsibility is assumed by Data Device Corporation for its use, and no license or rights are granted by implication or otherwise in connection therewith.

For ordering assistance and technical support,

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Visit: [www.ddc-web.com/Pascall](http://www.ddc-web.com/Pascall)   

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