

### Anderson Connectivity's KPSU Provides ARINC 792-Compliant Power and Isolation for Efficient Flat Panel ESA's



*The KPSU-Lite is an ARINC 792 compliant Ku/Ka-band Power Supply Unit intended to provide power for efficient flat-panel Electronically Steered Antennas.*

## Key Features of the KPSU-Lite

- 100% compliant with the ARINC 792 mechanical interface & electrical connector/pin arrangements
- Designed for DO-160G

### Signal Protection Modules include:

- ARINC 429 Inertial Navigation System data
- Modem or Aircraft Discrete Signals
- 100BaseT Ethernet Switch
- ANSI/TIA/EIA-485 and ANSI/TIA/EIA-422 input and outputs, with optional standard conversion

"The KPSU-Lite is focused on providing OEM's and System Integrators a cost-effective, qualifiable, near-COTS solution for emerging ARINC 792 IFEC systems. It offers a direct benefit for the airlines in terms of Life Cycle Cost, and allows the OEM's and System Integrators to focus on their core competencies and design to a common interface."

— Brian Anderson,  
President of Anderson Connectivity

## Smaller and lighter than ARINC 792 allocations

At half the height of a standard KPSU chassis and weighing only 9.0 pounds, the KPSU-Lite supplies up to 400W of clean, filtered, and isolated DC power in accordance with ARINC 792's Single-Phase KPSU embodiment.

## Innovation in Signal Protection

The KPSU-Lite contains a variety of Signal Protection Modules (SPM's) to isolate signals coming from other LRU's and/or aircraft systems and condition them for use by Outside Antenna Equipment.

## Environmentally rated and simple to integrate

All components, including the isolated AC/DC converter, associated input and output filtering, and Signal Protection Modules have environmentally rated components and retention, coordinated and layered EMI control measures, and heritage with previously qualified and deployed products designed and produced by Anderson Connectivity.

# KPSU-Lite

## Technical Specifications



### Power Supply

Input Voltage	100-122VAC, 1 $\phi$
Input Frequency	360-800 Hz
Power Factor	$\geq 0.98$ , Lagging
Efficiency	$\geq 85\%$
Holdup	300ms at full load
Output Voltage	30VDC
Output Power	350W Nominal, 400W Peak
Ripple	$\leq 200$ mV
Load Regulation	$\pm 1$ VDC
Protection	Over-Voltage, Over-Current

### Signal Protection Modules

AC Input Filter	Aircraft Power Protection
DC/DC Converter	5VDC out, others available
DC Output Filter	Clean EMI Suppressed Antenna Power
ARINC 429 Buffer	1 Rx Pair per module
ANSI/TIA/EIA-485 and ANSI/TIA/EIA-422 Buffer	2 channels per module
Discrete Buffer	Single-ended/Differential Signal Isolation and Safety
Ethernet Switch/Buffer	5 port 100BASE-TX

### Mechanical/Electrical Interface

Dimensions	18.0" x 9.1" x 2.8"
Weight	9.0 lb
Mounting Provision	Per ARINC 792
Cooling	Passive
Connectors	J1 -- Aircraft Interface -- D38999/20FD19PN J2 -- OAE Tx Pwr/Ctrl -- D38999/20FD97SN J3 -- OAE Rx Pwr/Ctrl -- D38999/20FD97SA J4 -- Power -- D38999/20FD5PN



Learn more at  
[AndersonConnectivity.com](http://AndersonConnectivity.com)