



TITAN
Power Systems



Success Story

**Flexible Power Supply
for Stabilized Weapon System**





A leading player in defense applications around the world, has partnered with Titan Power Systems since 1980 to develop ruggedized fan-less customized power supplies. The combined expertise led to the design and production of several products, and resulted in outstanding performance together with high quality products for the most challenging environments and mission critical power conversion products.

The Challenge

The customer's design team searched for an engineering partner for the development of customized power supply for their design, for Stabilized Weapon System. The customer needed a power supply that would fit into exceptional challenging environment, together with the flexibility for unknown input requirement due to high mix of vessels for similar weapon system. In addition, the customer required flexibility for using several systems from single power sources in order to save space and cost. The team was looking for optimal performance solution that could also incorporate their cooling strategy. The goal was to find COTS existing products with limited customized electro-mechanical solution, in order to provide the power conversion needs through multi outputs for few users, allowing constant alignment with Customer's development plans and eliminate the power supply design constraints.

Titan Power Systems Modification Solution

The customer selected Titan Power Systems to develop a power supply according to the requirements defined by the Customer's engineers to design electro-mechanical structures without the constraints commonly imposed by the use of standard components. Since 1970, Titan Power Systems has been developing and designing power conversion products for MIL and ruggedized challenging environments, including five generations of COTS products. Since the 3rd generation, Titan Power Systems focus on Fan-less, convection natural cooling, that will increase the life cycle of the products and will prevent maintenance requirements. The unique design allows extreme temperature range, wide input and extreme environment conditions.

Value-Add System Solutions – Increase Quality & reduce Cost

- Using standard products to meet customer's specific needs
- Alternative to customize power supplies
- Minimum development risk
- High quality, using existing field proven building blocks
- Short cycle time to market
- Cost effective with minimum NRE

Highlights

- Prompt development cycle of 12 weeks, including prototypes
- Wide input range 85-264 Vac, 50/60/400 Hz.
- Naval, off deck environment with extreme vibrations
- Human Safety regulations
- Custom adaptation of COTS products for multi outputs requirements.
- System knowledge
- Zero maintenance challenge