



TITAN
Power Systems



Success Story

**Light Modification (MOTS)
for Unmanned Surface Vessel**





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.

The Challenge

The customer's design team searched for an engineering partner for the development of customized power supply for their innovating design, for Unmanned Surface Vessel equipment project. The customer needed a power supply that would fit into exceptional challenging environment, together with demanding design specifications and space within limited time frame. 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 has been focusing 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
- Naval, on deck environment with extreme vibrations
- Human Safety regulations
- Custom adaptation of COTS products for multi outputs requirements.
- System knowledge
- Zero maintenance challenge
- Limited technology risk, using existing building blocks