

# iVS8H AC-DC Power Supplies: Flexibility and Scalability for Land-Based Radar Systems

## INDUSTRY

Defense and Aerospace

## SOLUTION

iVS8H AC-DC Power Supplies

## APPLICATION

Radar System

## CHALLENGE

The customer provides industry-leading maritime electronic support measures (ESM) for surface and subsurface vessels and is a leading producer of tactical air traffic management radars. The challenge for their new land-based radar system is to use a solution that provides flexibility and scalability. The customer's mechanical design team would like to circulate air inside the system chassis.

## SOLUTION

To meet the unique end customer requirements, the AE engineering team recommended iVS8H power supplies. The iVS8H series is designed to operate from a high voltage, 380 to 480 V, 3-phase AC mains supply. Single output modules come in four power ranges that can be mixed and matched. They can be connected in parallel or series to obtain thousands of output combinations customized to any application. User-configurable functions include current limit and output sequencing, as well as input and output OK signals and indicators. In order to circulate the air inside the system chassis, the AE team suggested blowing exhausted air from iVS8H to liquid-cooled heatsink.

### Features:

- Field Demonstrated MTBF to 550K Hours.
- Industrial Shock/Vib (> 50 G)
- Industrial Temp Range (40 to 70°C)
- Intelligent I2C Control
- Isolated 5 V at 1 A Standby Output
- Remote Sense on All Outputs Greater than 2 A
- Input Range 342 to 484 VAC 3-Phase



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## RESULT

By choosing the iVS8H, the end customer was able to leverage the support of Advanced Energy's engineering team for the field and thermal simulation. The engineering team could also build the cabinet as an additional value-add service.

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## BENEFITS

- iVS8H Capabilities: 3-Phase 440 V Input, RS-485
- Configurable Output Sequencing
- Digital Monitor of Voltage, Current, and Temp (Both Input and Output)
- Downloadable GUI
- EMI Conducted and Radiated to Class A
- External Switching Frequency Sync Input



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