



## AE3000 AVID EXTREME LIQUID COOLED INVERTER MODULES REPLACEMENT FOR MV3000 DELTA



- > **Completely new or remanufactured** with validation of components converted from your existing systems
- > **Water resistant** with Avid's patented sealing process of the power IGBT devices
- > **Ruggedized chip technology** (moisture resistant and higher reliability)
- > Sintered technology **SKiiP 4 IGBTs**
- > **Higher rated continuous current** and higher DC voltage ratings
- > **On board annunciation** with two (2) digital LED display with fault codes and a continuously monitored set of running parameters (refer to data sheet)\*
- > **Digital Gate Driver** (existing technology uses Analog circuitry)
- > **Conformal coating** of ALL PC cards
- > **CIB** (Control Interface Board) implements an onboard FPGA for enhanced troubleshooting annunciation, precise thermal modeling/feedback of actual junction temperature and digital interface between existing controller and SKiiP 4 IGBTs
- > **High reliability, high temperature components** used and extended burn-in time
- > **Stringent traceability** and burn-in requirements within Avid test procedures to insure reliable operation and eliminating infant mortality of semiconductor devices
- > **No warm up/dryout** needed after an extended shutdown
- > **MODBUS** communication connection for user's existing SCADA system supplied as a standard. Remote monitoring and diagnostics to provide fault codes, current in each phase from each inverter, voltage, temperatures etc so that the status of all inverters is known at any given moment. Deviations from normal operation can be seen before system failure. iOS and Android compatible. Wi-Fi optional.
- > Allows you to stand outside the inverter cabinet and safely access the AEI's diagnostics without the dangers of electrical exposure.
- > WIFI connection to iPhone or Android app is optional.
- > **Avid support** (24 hours a day/7 days a week/365 days a year).



# AEI UPGRADE PROGRAM EXAMPLES



Old Existing Delta Inverter System



New AEI Retrofit Kit Inverter System Installed

Avid offers an AEI Rolling Upgrade Program for those who want to utilize their existing Delta modules as part of the upgrade to AEI's. Details of the Program as follows:

- > An Avid AEI upgrade kit is purchased and put in stock at the Wind Farm. Kit includes:
  - Six (6) AEI modules
  - Six (6) AEI power supplies, APUs
  - Control transformer and small items necessary to install the complete kit
- > The 1st turbine fails
  - The AEI upgrade kit is installed. Avid will assist with the install as part of training for the onsite technicians for future installations.
  - The damaged Delta, sister Delta and both types of SMPS are sent to Avid for credit
  - The four (4) good Deltas and SMPS are put in stock at the site for the next turbine failure
- > The 2nd turbine fails
  - Two (2) Deltas are pulled from stock to repair the turbine
  - The damaged Delta, sister Delta and both types of SMPS are sent to Avid for credit
- > The 3rd turbine fails
  - Two (2) Deltas are pulled from stock to repair the turbine
  - The damaged Delta, sister Delta and both types of SMPS are sent to Avid for credit
- > An Avid AEI upgrade kit is purchased and put in stock so that the process can be repeated for the 4th turbine failure.

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