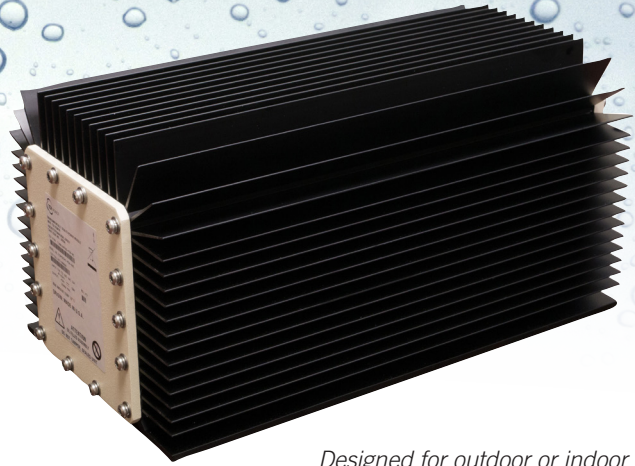


# ESPM 2500W, 50A

## ENVIRONMENTALLY SEALED POWER MODULE

### DESIGNED FOR REMOTE OPERATION IN RUGGED ENVIRONMENTS



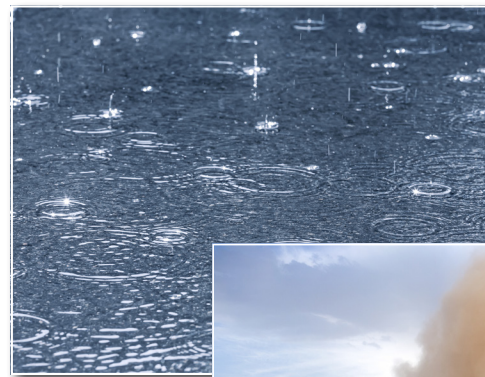
Environmentally Sealed Power Modules (ESPMs) are ideal for industrial applications. Leveraging TDI Power's vast experience in demanding Industrial, Military and Aerospace markets, this product delivers the highest standards of dependability, reliability and value.

*Designed for outdoor or indoor applications, the ESPM can be exposed directly to a variety of harsh environments.*

#### Features & Benefits

- **Environmentally Sealed**  
AC-DC Rectifier is Environmentally Sealed and ideal for Harsh Environments
- **No Fans Needed**  
Electronics are submerged in oil, making the unit Free Air Convection Cooled
- **Modular and Scalable**  
ESPMs may be paralleled with other like units for increased system output of scalable applications
- **Reliable Robust Design**  
100% HASS Tested
- **Safety**  
Output over-voltage protection safely shuts down the ESPM without user intervention
- **Compatibility**  
Compatible with a TDI system controller, or one of your own design

All electronics within the ESPM's aluminum chassis are fully sealed and submerged in oil, making the ESPM convection cooled and NEMA rated to be watertight, submersible, dust tight, corrosion resistant, sleet resistant and ideal for hazardous locations. The internal components stay cool and reliable without the need for fans or blowers.



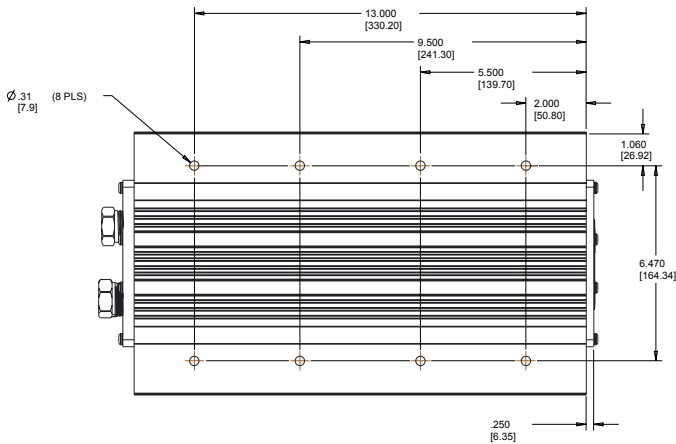
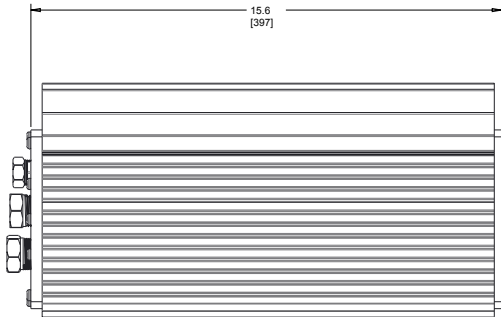
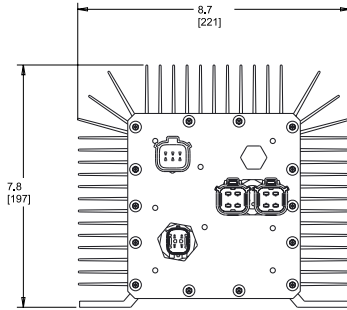
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# ESPM 2500W, 50A

## ENVIRONMENTALLY SEALED POWER MODULE



Specifications	
<b>AC INPUT</b>	
<b>Voltage:</b>	180-265VAC, 47-63Hz
<b>Input Current:</b>	17A rms maximum @ 176VAC
<b>DC Output</b>	
<b>Voltage</b>	50VDC
<b>Power:</b>	2,500W maximum
<b>Efficiency:</b>	90%, 50 to 100% load
<b>Parallel Use</b>	May be paralleled with other like units for increased system output, redundant diode included
<b>Current Sharing:</b>	Slope program current share, (droop) Droop: 200mv. 0 to100A
<b>Temperature Coefficient:</b>	< ±0.02% per°C
<b>Hold-Up Time:</b>	8mS min.
<b>Turn On Delay:</b>	<5 seconds
<b>ENVIRONMENTAL SPECIFICATIONS</b>	
<b>Normal Operation:</b>	-40 to +65°C Ambient temperature
<b>Low Temperature Turn On:</b>	-40°C Minimum for warm up
<b>Storage / Transportation:</b>	-40°C to +85°C
<b>Humidity Operating &amp; Storage:</b>	0% to 100% RH condensing
<b>Vibration, Operating:</b>	14g-rms, random, tri-axial vibration for 1 hour
<b>Vibration, Transportation:</b>	Packaged units withstand, without damage, two complete cycles from 5Hz to 100Hz to 5Hz: 0.5 g at 0.1 octaves/min. From 100Hz to 500Hz to 100Hz: 1.6 at 0.25 octaves/min.
<b>Salt Fog:</b>	MIL-STD 810C, Method 509.1
<b>Audible Noise:</b>	None
<b>Cooling:</b>	Oil cooled. No fan required. Needs ventilation to maintain ambient
<b>PHYSICAL DIMENSIONS</b>	
<b>Dimensions:</b>	H19.7 x W22.2 x D39.4 cm (7.76 x 8.74 x 15.51")
<b>PROTECTION</b>	
<b>Output Over-Voltage:</b>	Shutdown at 120% Nominal Output Voltage, Recycle of input voltage required to reset OVP circuit.
<b>Output Over current:</b>	Electronic with automatic recovery
<b>Short Circuit Protection:</b>	Short circuit protection utilizes hiccup
<b>Over-Temperature</b>	Over temperature shutdown with auto recovery
<b>Input Reverse Polarity:</b>	AC fused internally
<b>Weight:</b>	14.9 kg (32.8lbs)
<b>EXTERNAL CONTROL</b>	
<b>Power Plant Controller:</b>	Compatible with TDI system controllers.
<b>SAFETY AND REGULATORY AGENCY SPECIFICATIONS</b>	
<b>RoHS:</b>	Compliant (Lead Solder Exemption Directive, RoHS 5)

