

FEATURES

- **Environmentally Sealed for Harsh Environments**
- **Convection Cooled**
- **89% Efficiency**
- **Parallelable for Scalable Applications**

AC INPUT

Voltage: 90-275VAC, 47-63Hz

Input Current: 16A rms maximum @ 90VAC

Peak Inrush Current: <35A

DC OUTPUT

Voltage: 27VDC (adjustable)

Power: 1,200W maximum

Efficiency: 89%, 50 to 100% load

Line Regulation: Less than $\pm 0.25\%$

Load Regulation: 0.50 volt Droop Current Sharing for N+1 Parallel, Redundant operation

Parallel use: May be paralleled with other like units for increased system output, redundant diode included

Current Sharing: Slope program current share, (droop)

Droop: 500mv. 0 to 100A

Dynamic Response: <5% for a 50% to 100% step load. Return to regulation in <500usec

Ripple & Noise: 1% V P-P Measured with 20Mhz Bandwidth

Temperature Coefficient: < $\pm 0.02\%$ per °C

Hold-Up Time: 8mS min.

Turn On Delay: <2 seconds

Turn On Overshoot: <1% nominal output voltage

ENVIRONMENTAL SPECIFICATIONS

Normal Operation: -20 to +35°C Ambient temperature

High Temperature Operation: >35°C, de-rate 23.3W per °C to 65°C

Low Temperature Turn On: -40°C Minimum for warm up

Storage / Transportation: -40°C to +85°C

Humidity Operating & Storage: 0% to 100% RH condensing

Vibration, Operating: 14g-rms, random, tri-axial vibration for 1 hour

Vibration, Transportation: 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.

Shock, Transport: Packaged, drops, 6 faces, 8 corners

Salt Fog: MIL-STD 810C, Method 509.1

Audible Noise: None

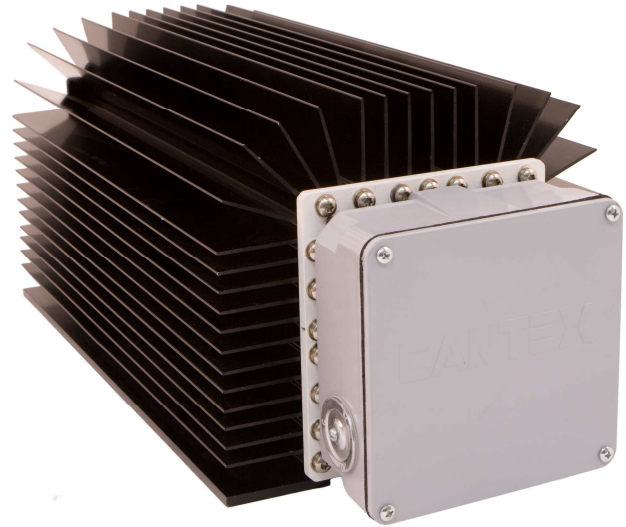
Cooling: Sealed, convection cooled module. No fan required. Needs ventilation to maintain operation.

PHYSICAL DIMENSIONS

Dimensions: H19.56 x W21.84 x D41 cm (7.70 x 8.6 x 16")

Weight: 14.74 kg (32.5 lbs)

Input/Output: Terminal Blocks in permanently attached junction box.



PROTECTION

Output Over-Voltage: Shutdown at 120% Nominal Output Voltage, Recycle of input voltage required to reset OVP circuit.

Output Over current/Short Circuit Protection: Electronic with automatic recovery

Over-Temperature: Over temperature shutdown with auto recovery

Input Over-Current: AC fused internally

EXTERNAL CONTROL

Power Plant Controller: Compatible with TDI system controllers.

AC Fail: AC OK, TTL compatible alarm

Output Good: Output Good, TTL compatible alarm

Output voltage programmable by 0-5V input

SAFETY AND REGULATORY AGENCY SPECIFICATIONS

Input Leakage Current to Safety Ground: <3.5mA @ 275VAC

Input to Ground Isolation Voltage: 1500VAC

Input to Output Isolation Voltage: 3000VAC

Output to Ground Isolation Voltage: 500VAC

RoHS: Compliant (Lead Solder Exemption Directive, RoHS 5))

ELECTRO-MAGNETIC COMPATIBILITY

Conducted and Radiated Emissions: FCC Part 15, Subpart j, Class A; and EN55022, Class A

Harmonics: EN61000-3-2

Static Discharge: EN61000-4-2, Class 3, stand-alone

RF Field Susceptibility: EN61000-4-3, Class 3

Fast Transient/Burst: EN61000-4-4, Class 3 (2kV)

Surge: EN61000-4-5, Class 4 (2kV L-L, 4kV L-EARTH)

(Units tested to 8kV surge L-L and L-EARTH)

OPTIONS: Solar Shield

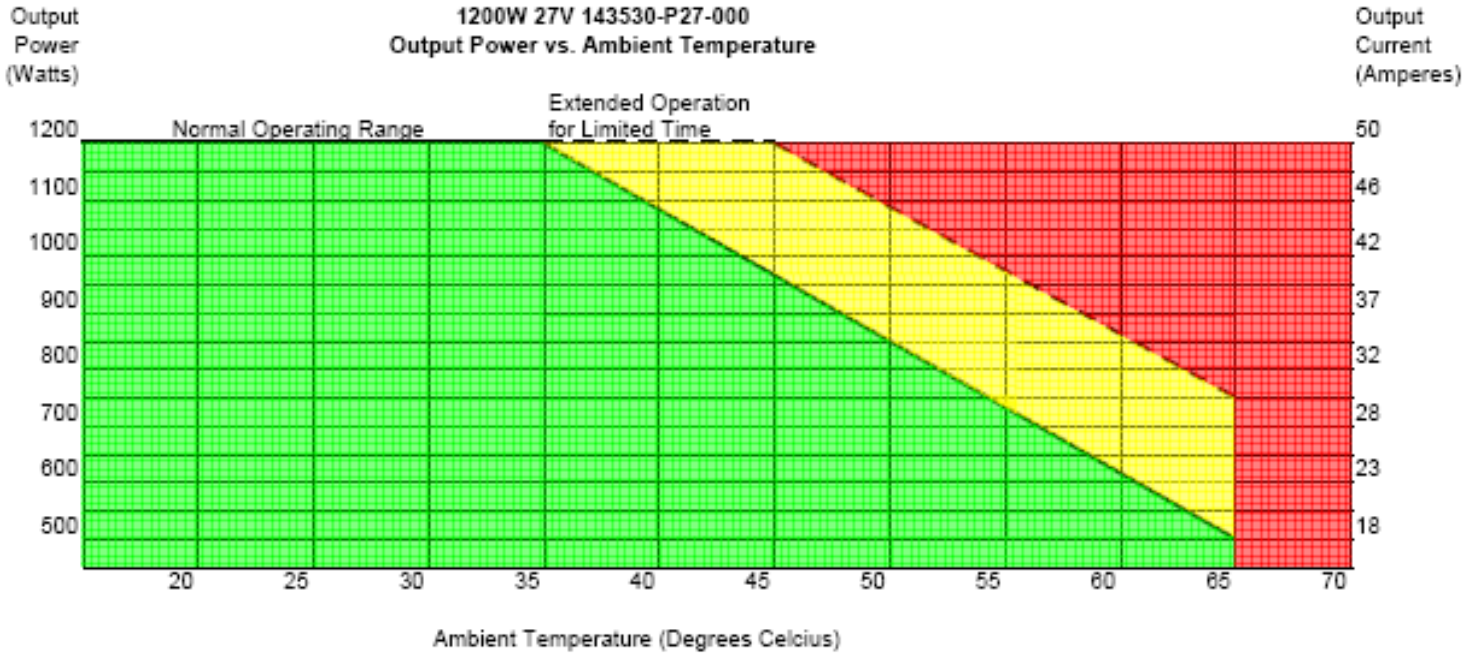
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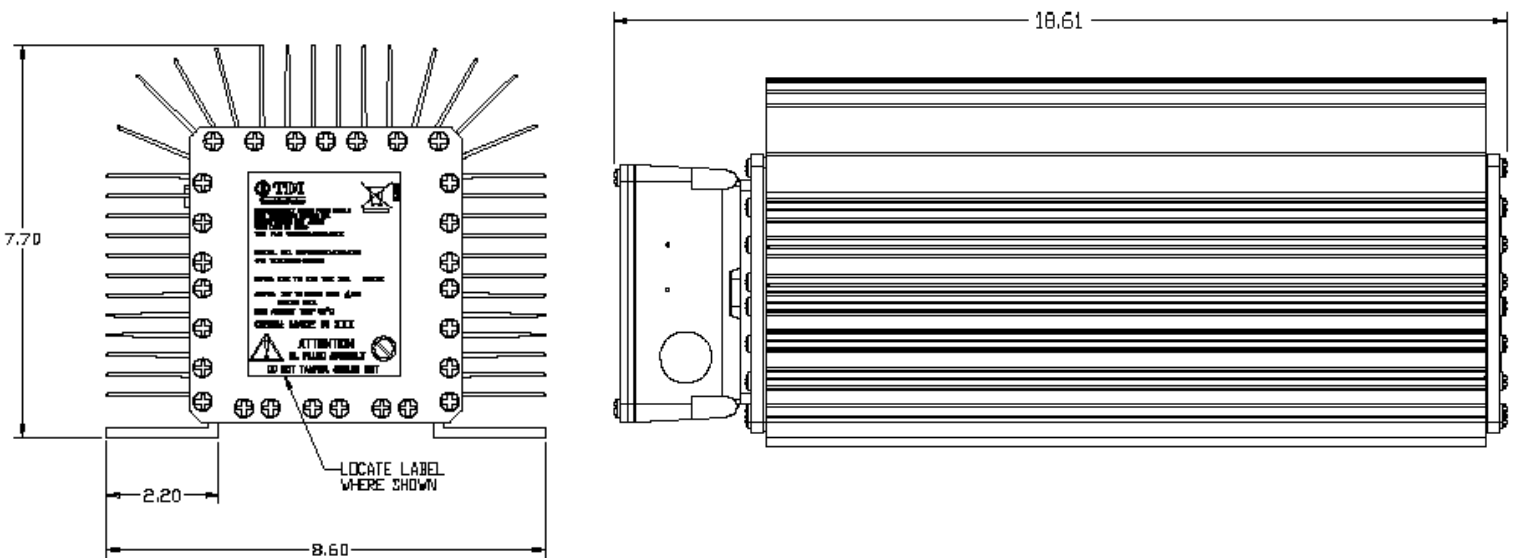
DEMANDING APPLICATIONS DEMAND TDI POWER

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OUTPUT POWER vs. TEMPERATURE



MECHANICAL INFORMATION



ORDERING INFORMATION

Part no.	Description
143530-P27-000	1200W, AC-DC ESPM, 27 Volt

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