

## High Voltage PowerNode 440 VAC, 3-phase, 4-wire input



Astrodyne TDI's 22.8kW Power System provides industrial grade DC power for process power, semiconductor manufacturing, test and burn in, and other industrial applications. Housed in a compact 4U high chassis, MercuryFlex sub-modules assure reliability for critical applications. Shelf assemblies can be connected in parallel for increased power, providing ultimate flexibility for modern processes.

### Main Characteristics:

- Flexible Output supports multiple configurations
- Constant Voltage, Constant Current, Constant Power mode with automatic cross over
- Blind Mate Field Replaceable Modules for low MTTR
- CE Mark/Power Supply Modules NRTL (UL Recognized) approved and marked.
- 4U, 19in rack mount

### BENEFITS

**Reduced System Complexity and Time to Market**  
Wide range of models with fully adjustable outputs. Multiple control modes provide ultimate application flexibility.

**High Reliability for Critical Applications**  
Astrodyne TDI's comprehensive reliability assurance processes, including design to the rigorous requirements of NAVSO P3641A, HALT, DFMEA and our unique Highly Accelerated Stress Screening (HASS) on 100% of production units, assure the ultimate in unit reliability and performance.

**High Power Density**  
Up to 22.8kW power in a 4U high, 19" rack space.

### FEATURES

**Three Phase AC Input**  
350VAC – 528VAC, three phase delta

**Wide Range Outputs**  
125V (10V-125V)  
250V (10V-250V)  
450V (15V-450V)

System Output Power up to 22.8kW  
Constant voltage or constant current operating modes

**Controls:**

- CAN-BUS interface and controls

**Variable Speed Fan Control**  
Minimizes audible noise and maximizes fan life

**Astrodyne TDI**  
Now you have power.

[www.AstrodyneTDI.com](http://www.AstrodyneTDI.com) | +1 908-850-5088

© Copyright 2020, Astrodyne, Inc  
(and it's affiliates, d/b/a Astrodyne TDI)

This document is believed to be correct at the time of publication and Astrodyne, Inc accepts no responsibility for consequences from printing errors or inaccuracies. Specifications are subject to change without notice.



# High Voltage PowerNode

440 VAC, 3-phase, 4-wire input

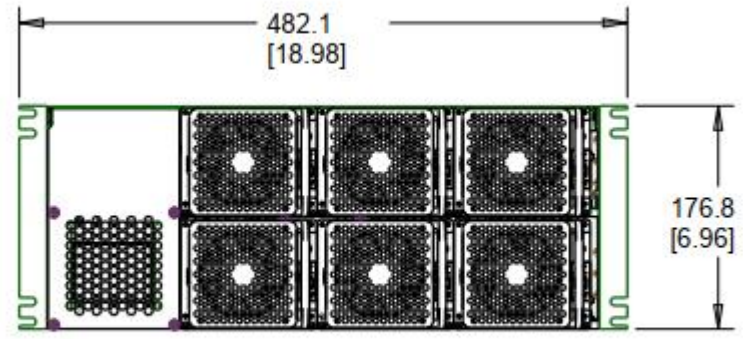
PARAMETER	SYSTEM
Input AC	350 – 528VAC
AC Frequency	57-63 Hz
Output Power	22,800W
Outputs, DC (Options)	125V (10V-125V) at I up to 207A 250V (10V-250V) at I up to 105A 450V (15V-450V) at I up to 60A
Power Factor	.97
Efficiency	93% at full load
Ripple/Noise	<1% p-p of Voutmax
Load Regulation	<2% of Vout Max from no load to full load (droop load share)
Line Regulation	<0.25% of operating output voltage
Hold Up Time	>20mS
Protection Features	Output Over-current: Automatic electronic current limit circuitry Output Over-voltage: Nominal trip point fixed Over-temperature: Unit shut down if excessive temperature is detected Input Over-current: 50A Fuses (L1, L2, L3)
Visual Indicators	Visual LEDs on individual modules
Isolation	Input to Output: 3000Vrms Input to Ground: 1625Vrms Output to Ground: 1674Vrms
Operating Temperature	0 to +40°C
Storage/Transportation	-40 to +70°C
Humidity	5% to 95%RH, noncondensing
Connections	AC Input: Rear Panel mount Heavy Duty Terminal Block DC Output: Heavy Duty Bus Bars Remote Sense: 9 pin DSUB CAN Bus: RJ11
EMC	Radiated and conducted emissions meet FCC Part 15, Subpart A class A, and EN55022, Class A
AC Line Sag	Compliant to SEMIF47-0706
Harmonics	Compliant to EN61000-3-2
Dimensions	Shelf : 4U x 24.8" x 19" (Rack mountable)
Weight	50lbs
Cooling	Internal Fan, front air input



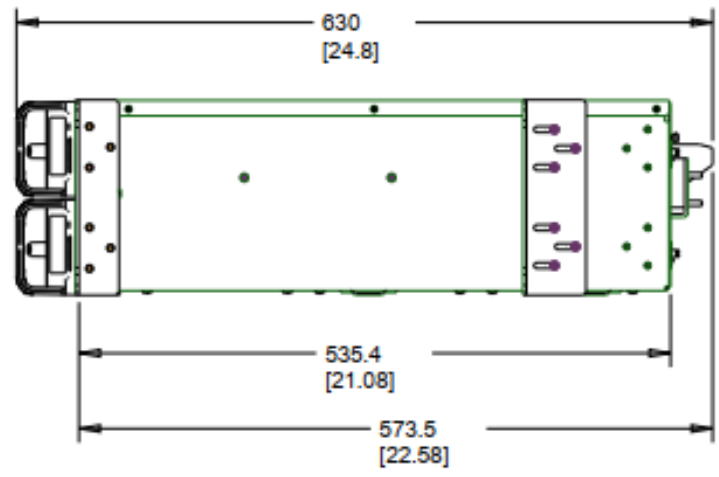
# High Voltage PowerNode

440 VAC, 3-phase, 4-wire input

## Shelf Dimensions:



Front View



Side View