# PowerNode Mercury Flex Power System

V9/22





Astrodyne TDI's PowerNode 10kW Power System provides industrial grade DC power for process power, semiconductor manufacturing, medical imaging, test and burn in, and other applications. Housed in a compact 2U high chassis, Mercury Flex sub-modules assure reliability for critical applications. PowerNode assemblies can be connected in parallel for increased power, providing ultimate flexibility for modern processes.

# **Main Characteristics:**

- Front panel Touch Panel LCD Display
- · Remote User Interface
- · Front panel mounted Circuit Breaker
- N+1 redundancy
- CE Mark/Power Supply Modules NRTL (UL Recognized) approved and marked.
- Blind Mate Field Replaceable Modules for low MTTR
- Constant Voltage, Constant Current, Constant Power mode with automatic cross over

# **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 10kW power in a 2U high, 19" rack space.

# **FEATURES**

Three Phase AC Input 180VAC – 253VAC, three phase delta

Wide Range Outputs 125V (10V-125V)

**250V** (15V-450V)

450V (10V-250V)

Up to 10kW power

Constant voltage, current, or power operating modes

### **Controls:**

- Industry standard analog controls
- CAN-BUS interface and controls
- Ethernet (ModBus TCP) controls

# **Variable Speed Fan Control**

Minimizes audible noise and maximizes fan life





# MODEL NUMBER PART NUMBER DESCRIPTION

SPS6075-LF T100112517-LF SYSTEM, 10KW MERCURY FLEX POWER SYSTEM

\*For other options please contact the factory

PARAME		ERNO	

Input AC 180-253VAC, tree phase delta

AC Frequency 47-63Hz

Max Input Current 36A for 1800VAC at 10kW output power

Power Factor >.98 / IEC61000-2 Compliant

Outputs, DC 125V (10V-125V) @ I up to 103.5A

250V (15V-450V) @ I up to 52.5A 450V (10V-250V) @ I up to 30A

Output Power 10,000 W Maximum

Efficiency >93%

Ripple/Noise Less than 4Vpk-pk, 200mV(rms)

**Load Regulation** 2% (8V) droop from no load to full load

**Protection Features** Front Panel Circuit Breaker

LED's on individual modules

Visual Indicators Front panel LCD display

Operating Temperature -30 to +55°C (full rated)

Storage/Transportation -40 to +85°C

**Humidity** 0% to 95% non-condensing

**Isolation** Input to Output: 3000 Vrms

Input to Ground: 1625 Vrms
Output to Ground: 1674 Vrms

**Connections** AC Input: Terminal Block

DC Output: Heavy Duty Bus Bars

Analog Control: 25 pin DSUB

Ethernet RJ45 CAN Bus: RJ11

**EMC** Radiated and conducted emissions meet FCC Part 15, Subpart A class A, and EN55022, Class

Α

**Dimensions (inches)** 17.25" x 20.84" x 3.46"

25lbs

Saftey UL/IEC/EN 60950-1

**Cooling** Internal Variable Speed Fan, front airdaw

Warranty 1 Year



