





6 kW, N+1 REDUNDANT,

THREE PHASE,

POWER-FACTOR CORRECTED,

48V FRONT END



PS2314 POWER SUPPLY FEATURES

INPUT POWER: Y Connection, Three Phase with Neutral 180 Vac - 528 Vac Line to Line, 47 - 63 Hz,

24A Max service, with Active Power Factor Correction (104 - 305 Vac Line to Neutral).

INRUSH CURRENT: Limited by Active Inrush Current Protection @ 25°C to less than 70A peak @ 528Vac Line to Line.

INPUT CONNECTOR: Leviton 30A, 480V, 3 phase, 4 pole with 5th wire for grounding (p/n 2825).

OUTPUT POWER: 6 kW Max (48 Vdc @ 125 A) with Third Wire current sharing capability.

OUTPUT CONNECTOR: Two Floating ELCON Flatpag connectors for power and chassis

SIGNAL CONNECTOR: Molex Connector for Current Sharing, Interlock, PSU WAIT, CAN Bus ID Pins, CAN Bus and

grounding.

OPERATING AMBIENT: -10 to 55°C

COOLING: Two push-pull 48V, 190 CFM fans

FRONT PANEL LEDs: INGOOD1, INGOOD2, INGOOD3, Fan/ Temp status and OUT GOOD.

MCC REPORTING: Current Out, Inlet and Outlet Temperature, INGOOD1, INGOOD2, INGOOD3, OGOOD,

Fan Status, Over Temperature, Over Voltage and Over Current (via CAN Bus). CAN (Control Area

Network)

MCC CONTROL: Output Enable, LED Test.

CONSTRUCTION: Fully enclosed steel chassis.

NOMINAL SIZE: 23"L x 6.2"H x 8.3"W (584 mm x 157 mm x 210 mm)

WEIGHT: Approx. 38 Lbs.



PS2314 POWER SUPPLY FEATURES

(Continued)

PROTECTIONS: • AC Input undervoltage protection

Self-restarting type overvoltage protection on 410 Vdc bus.

Primary power limiting for PFC Boost and Down Converters.

• Primary and Secondary overtemperature protection, resetting with hysteresis.

• Latching Output overvoltage.

• Non-latching hiccup type output current limiting and short circuit protection.

INPUT POWER: Three 70 kHz, power factor corrected boost converters with more than 2.2 kW of output power

capability per channel.

Three flyback converters, each powered by a separate PFC channel.

OUTPUT POWER: Three channels, each containing a 2 kW, 111 kHz, Zero Voltage Switching, Phase Shifted Full

Bridge with forced internal current sharing between channels.



POWER SUPPLY MECHANICAL OUTLINE









