



The Ultra-compact SUPRAMAX 1000 and 1500

Featuring:

- Compact, low-profile package, only 3.38"H x 8"W x 12"L
- Active Power Factor Correction to 0.99
- Designed for low AC line distortion per IEC 555-2
- Aux. outputs are Todd MAGNA-FLUX mag amp regulated
- High-reliability, low-cost open frame technology
- Integral RFI filters meet EN 55022 level B and FCC, Class A
- True remote inhibit for system on/off

Now SUPRAMAX, the smallest 1000 watt power factor corrected open frame switcher, is also available in single-output 1000 and 1500 watt versions. Incorporating all the innovation of the multi-output 1000 watt, Todd's SUPRAMAX series offers high performance and low cost with reliable open frame technology. Connectors are provided for quick system assembly, and units can be operated without fans with sufficient customer-supplied airflow. SUPRAMAX gives you all this and more at prices no higher than those of common shoe box switchers without pf correction.

1000 WATT—MULTI-OUTPUT AC INPUT 3.38" x 8" x 12"

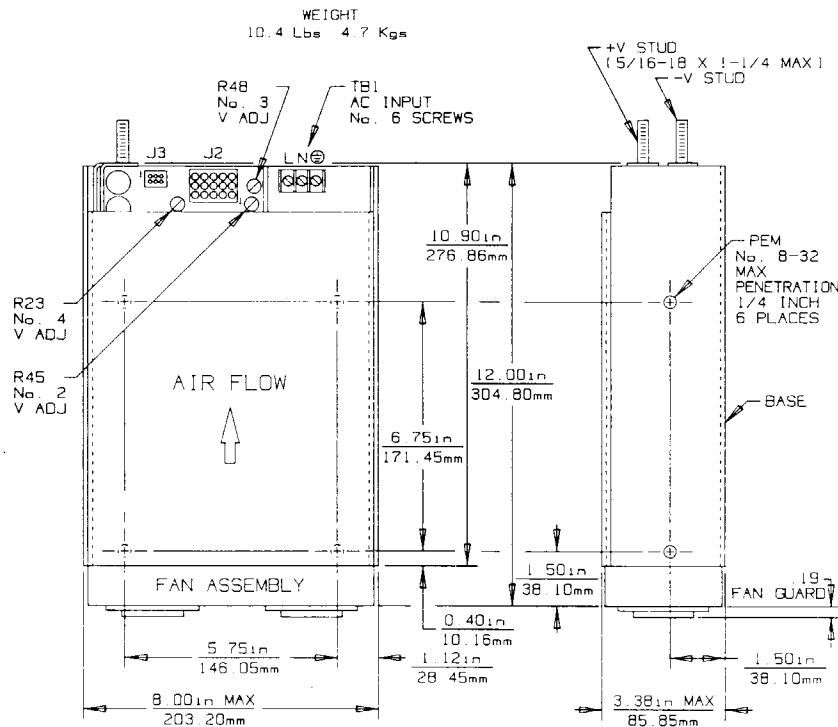
MODEL	PWR	OUTPUT #1	OUTPUT #2	OUTPUT #3	OUTPUT #4
MAX-1003-0512	1000	+5V @ 150A	+12V @ 20/30 Apk	-12V @ 10A	—
MAX-1004-1203	1000	+5V @ 150A	+12V @ 20/30 Apk	-12V @ 10A	3.3V @ 10A
MAX-1004-1205	1000	+5V @ 150A	+12V @ 20/30 Apk	-12V @ 10A	5V @ 10A
MAX-1004-1212	1000	+5V @ 150A	+12V @ 20/30 Apk	-12V @ 10A	12V @ 10A
MAX-1004-1224	1000	+5V @ 150A	+12V @ 20/30 Apk	-12V @ 10A	24V @ 5A
MAX-1004-1512	1000	+5V @ 150A	+15V @ 20/30 Apk	-15V @ 10A	12V @ 10A
MAX-1004-1524	1000	+5V @ 150A	+15V @ 20/30 Apk	-15V @ 10A	24V @ 5A

1000 WATT 90-264 VAC INPUT—SINGLE OUTPUT

MODEL	OUTPUT RATING	PWR OUT
SPF-1000-05	5V @ 200A	1000w
SPF-1000-12	12V @ 84A	1000w
SPF-1000-15	15V @ 67A	1000w
SPF-1000-24	24V @ 42A	1000w
SPF-1000-28	28V @ 36A	1000w
SPF-1000-48	48V @ 21A	1000w

1500 WATT 180-264 VAC INPUT—SINGLE OUTPUT

MODEL	OUTPUT RATING	PWR OUT
SPF-1500-05	5V @ 300A	1500w
SPF-1500-12	12V @ 125A	1500w
SPF-1500-15	15V @ 100A	1500w
SPF-1500-24	24V @ 63A	1500w
SPF-1500-28	28V @ 54A	1500w
SPF-1500-48	48V @ 32A	1500w



SPECIFICATIONS: ALL MODELS.

AC Input: 90-264 Vac continuous range, 47 to 63 Hz. Internally fused for 20 A.

Power Factor: 0.99 typical at full load.

Input Current: 12A max @ 120 Vac under full load conditions.

Adjustability: All outputs user adjustable.

Line & Load Reg: $\pm 1\%$ over AC input range and 0 to 100% load change. Main +5V output requires minimum load of 10%.

Ripple & Noise: Less than 0.2% rms, 1% p-p or 100mV, whichever is greater.

Remote Sense (Output #1): Compensates for 250 mV total line drop. Open sense lead protection.

Temperature Coefficient: 0.02% per degree C.

Stability: 0.1% over 8 hours after 30 minutes warm-up.

Transient Response (+5V): Output voltage returns to within 1% in less than 500 μ sec for a 50% load change. Peak transient does not exceed 5%.

Overload Protection: All outputs are protected against overload and short circuit. Automatic recovery upon removal of fault.

Overvoltage Protection (All outputs): Protects load against power supply induced overvoltage. Trip point is set at maximum 136% of nominal voltage.

Peak Output Current: Dual current ratings define continuous and peak currents. The peak current shown can be delivered for a maximum period of 30 seconds.

Inrush: Cold Start AC current is less than 90 A at 115 Vac, 180 A at 230 Vac. Limited by surge protector.

Brownout Protection: Holds regulation to 85 Vac.

Thermal Protection: Shuts down power supply if overheated. Automatic recovery.

Holdup Time: 20 ms minimum after removal of power at full load and through input voltage range.

Temperature Range: 0 to 50°C full ratings. Derate to half power at 70°C.

Efficiency: 75% typical.

Safety Agencies: Most models are approved for UL 1950, CSA 22.2 #1402c, #234, TUV IEC 950, VDE 0806, EN 60950, VDE 0805, class 1 SELV. Contact factory for status.

Conducted RFI: Meets FCC Part 15, Subpart J, Class A; EN 55022 Level "B"; and German Decree "VFG 243."

Output Isolation: Isolated from ground 50 V.

Reverse Voltage: Protected against reverse voltage up to supply current rating.

DC Power Good: Provides a TTL "1" when output #1 is above 4.6 Vdc nominal.

Power Fail: Provide TTL "0", 5 ms before output voltage goes out of regulation band, upon loss of AC power, VMEbus compatible, provides 48ma sink current capability.

Cooling: Self-cooled with internal ball-bearing fans. Can be operated without fans with sufficient customer-supplied air flow.

Reliability: Over 100,000 hours, when calculated in accordance with MIL-HDBK-217E, and in Option "X" configuration.

Remote Inhibit: True inhibit shuts unit off with TTL "0" signal, or contact closure.

OPTIONS:

Option "X", System Cooling: Customer supplied air of 100 CFM through end of unit provides sufficient cooling for full power operation. Fans are not included with unit. Consult factory for other available options.

AC INPUT (90-264 Vac Continuous Range)

FUNCTION	115 Vac	230 Vac	CONNECTOR
TB1-L	Line	Line 1	Barrier Strip #6-32 Screws 3/8" Centers
TB1-N	Neutral	Line 2	
TB1-⊕	Safety Ground	Safety Ground	

DC OUTPUT

FUNCTION	LOCATION	NOTES	CONNECTOR
Output #1	Terminal marked +V	Main output	Stud 5/16-18 x 1 1/4"
	Terminal marked -V	5 Volt Rtn (common)	
Output #2	J2-1, J2-2 and J2-3(+)	Aux output	Pin header AMP MATE-N-LOK Type 350830-1. Mates with plug housing 350736-1 with Pins.
	J2-4, J2-5, and J2-6 (RTN)	Aux Return (common)	
Output #3	J2-7, J2-8, and J2-9(-)	Aux output	
	J2-4, J2-5 and J2-6 (RTN)	Aux Return (common)	
Output #4	J2-10, J2-11 and J2-12(+)	Floating output	
	J2-13, J2-14, and J2-15(-)		

STATUS AND CONTROL

FUNCTION	LOCATION	NOTES	CONNECTOR
Remote Sense	J3-1	Output #1 Sense	Pin header Molex 1625-6 Series with Sockets 1779 Series. Mates with plug housing 1625-6 Series with Pins Series 1560.
	J3-4	Output #1 Sense Rtn	
DC Power Good	J3-3	Reference to J3-4	
AC Power Fail	J3-5	Reference to J3-4	
Inhibit Input	J3-6	Short to J3-4	