

SPX-500-S/U SERIES

500 WATT (-S) SELECTABLE OR (-U) UNIVERSAL INPUT
ONE TO FOUR OUTPUTS



HIGH RELIABILITY GREATER THAN 120,000 HRS. MTBF



FEATURES:

100 KHz Operation
Sizes 5" x 2.6" x 11.5"
75% Efficiency Typical
Meets EN55022 Level A / FCC Class A

TYPICAL MODELS AND THEIR OUTPUT RATINGS:

MODEL NO.	V1	V2	V3	V4
SPX-500T-SF	5/70A	12@10/16Apk	-12/6A	
SPX-500Q-UF	5/80A	15@5/10Apk	-5.2/6A	12/2A
SPX-500Q-UF	5/80A	12@10/16Apk	-12/10A	5.2/2A
SPX-500Q-SF	5/70A	24@5/10Apk	-12/10A	15/2A

or configure your own output requirements from the chart below:

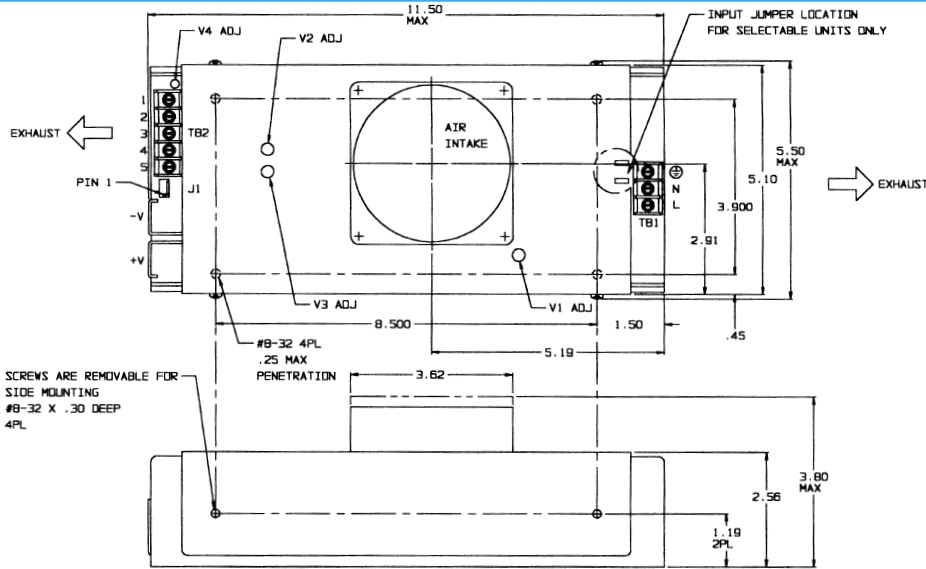
	OUTPUT VOLTAGE (VDC)	OUTPUT AMPERS (MAX)	OUTPUT POWER (WATTS)
V1	2 to 48	80	500
V2	2 to 48	12	180
V3	2 to 48	10	120
V4	5 to 48	2	50



3601 VETERANS HIGHWAY
RONKONKOMA, NEW YORK 11779
TEL (631) 981-7231 FAX (631) 981-7266

VISIT US ON THE WEB:
<http://www.switchpwr.com>

SPX-500 SERIES 500 WATT COMPACT SIZE



AC INPUT			
FUNCTION	115 VAC	230 VAC	CONNECTORS
INPUT SELECT ONLY	SHORT	OPEN	.250 FASTONS
TB1-(L)	LINE	LINE 1	BARRIER STRIP
TB1-(N)	NEUTRAL	LINE 2	#6-32 SCREWS
TB1-(GND)	SAFETY GROUND	SAFETY GROUND	

DC OUTPUTS		
FUNCTION	LOCATION	CONNECTOR
V1	MAIN OUTPUT	BUS BARS #1/4-20 SCREWS
+V2	TB2-3	#6-32 SCREWS
RTN V2/V3	TB2-4	#6-32 SCREWS
-V3	TB2-5	#6-32 SCREWS
+V4	TB2-1	#6-32 SCREWS
-V4	TB2-2	#6-32 SCREWS

STATUS AND CONTROL			
FUNCTION	LOCATION	NOTES	CONNECTOR
REMOTE SENSE	J1-1(+S)	OUTPUT #1 SENSE	AMP MTA TYPE
	J1-2(-S)	OUTPUT #1 SENSE RTN	#640456-4 PIN
AC POWER FAIL	J1-3(PF)	REFERENCE TO J1-2	HEADER (LOCKING)
DC POWER GOOD	J1-4(LH)	SHORT TO J1-2	
INHIBIT	J1-4(LH)	SHORT TO J1-2	

*IN PDF FORMAT, PRINT
OR ZOOM TO SEE DRAWING

Nominal Input Voltage	115-240 VAC.	Overvoltage Protection	V1 voltage clamp factory set at 20% to 30% above output voltage. V2, V3, V4 failsafe design.
Frequency	47-63 Hz 400Hz. available.	Overtemperature Protection	Unit shuts down if overheated. Automatic recovery.
Operational Input Voltage Range	115/230 VAC 90-264 VAC	Cooling	-F, -F1 equipped with fan or user provides min. 30 CFM.
Inrush Current	Less than 50 A for 5 msec. @ 115 VAC, or 80 amperes @ 230 VAC.	Input/Output Isolation	4242 VDC, SELV construction.
Ride Thru	Outputs hold up for 20 msec after loss of AC.	Remote Sense V1 Output	Up to 0.5 volts total in load.
Fusing	12Ampere, 250 VAC, Internal ceramic body fuse.	Remote On/Off	Standard - Open to run.
Efficiency	75% typical.	Power Good or Power Fail	Standard - Norm logic "1". AC Power Fail Signal is a Normal '1' which switches states at least 5 msec before loss of outputs after AC Failure.
Turn on time	Less than 500 msec.	Operating Temperature	-20°C to 50°C full output. 50°C to 75°C, derate 2%/°C.
Load Regulation	1% for 10% to 100% load changes, all outputs. 10% min. load required on V1 for max load reg. on outputs V2 to V4.	Stability	All outputs 0.5% for 8 hrs. after 1 hour warm-up.
Line Regulation	± 0.5% over operating line range, all outputs.	Humidity	Up to 95% non-condensing.
Ripple & Noise	1% ripple, 1% noise or 100mV which ever is greater. 20MHz bandwidth.	EMI	Meets FCC Class A and EN55022 Level A
Transient Response	Output maximum excursion of ± 5% for 25% load step. Recovery less than 500 usec.	Size	5.5"x11.50"x3.80" over fan
Short Circuit and Overload Protection	All outputs are protected from short circuit and overload. Automatic recovery.	Weight	5 lbs.
Overshoot	No turn-on or turn-off overshoot.	Safety	UL 1950, CSA 950-95, EN60950.

SERIES BREAKDOWN:

SPX-500S ONE OUTPUT
SPX-500D TWO OUTPUT

SPX-500T THREE OUTPUT
SPX-500Q FOUR OUTPUT

THEN ADD:
THEN ADD:
OR ADD:
EXAMPLE:

-S FOR SELECTABLE OR -U FOR UNIVERSAL INPUT
-F FOR TOP FAN; OR LEAVE OFF THE -F IF THE USER WILL PROVIDE COOLING.
-F1 FOR SIDE FAN; OR LEAVE OFF THE -F1 IF THE USER WILL PROVIDE COOLING.
SPX-500T-UF; THREE OUTPUT; WITH TOP FAN; UNIVERSAL INPUT;
SPECIFY OUTPUT VOLTAGES, CURRENTS AND OTHER OPTIONS.

REV:A