



KEY FEATURES

- *Universal input
- *Built-in EMI filter
- *Optional $\pm 12\text{VDC}/\pm 24\text{VDC}/\pm 48\text{VDC}$ input

APPLICATIONS

- *Telecommunications/Business machines
- *Computer peripherals/Medical instruments
- *Test & industrial equipments
- *Lan & Hub

ELECTRICAL SPECIFICATIONS

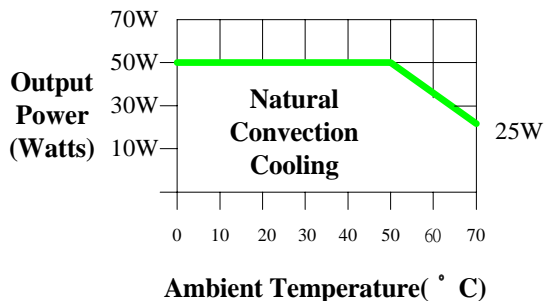
INPUT

- *Input range-----90~264 VAC, universal
- *Frequency-----47~63Hz
- *Inrush current-----35A typical, Cold start @25°C, 115VAC
- *Efficiency-----65%~80% typical at full load
- *EMI filter-----FCC Class B conducted, CISPR 22
Class B conducted, EN55022 class B
Conducted
- *Line regulation----- +/- 0.5% typical

OUTPUT

- *Maximum power----50W convection (Refer next page)
- *Hold-up time -----10ms typical at full load and 115 VAC
nominal line
- *Overload protection-Short circuit protection
- *Overvoltage
protection -----Main output 20% to 40% above
nominal output
- *Ripple/Noise ----- +/- 1% Max. @ full load
(Optional +/-0.5 % per inquiry)

Power Derating Curve



EMI & EMC

- *FCC part 15, Class B
- *CISPR 22 / EN55022, Class B
- *VCCI, Class 2
- *CE, EN61000-3-2 (Class A) and -3 ; EN61000-4-2,
-3 , -4 , -5 , -6 and -11

SAFETY APPROVAL

- *UL1950 / c UL
- *Optional CSA 22.2, LEVEL 3 (COMPLY WITH)
- *TUV EN60950
- *Optional UL 2601 (EMI Class A)(COMPLY WITH)

ENVIRONMENTAL

- *Operating temperature :
0 to 50°C ambient; derate each output at 2.5% per
degree from 50°C to 70°C
- *Humidity:
Operating; non-condensing, 5% to 95%
- *Vibration :
10~55 Hz at 1G 3 minutes period, 30 minutes along
X, Y and Z axis
- *Storage temperature:
-40 to 85°C
- *Temperature coefficient:
+/- 0.05% per degree C
- *MTBF demonstrated:
>100,000 hours at full load and 25°C ambient
conditions

PPS50 SWITCHING MODE 50W OPEN FRAME POWER SUPPLIES

MODEL	OUTPUT VOLTAGE	ADJUSTMENT RANGE	MAXIMUM OUTPUT CURRENT	PEAK OUTPUT CURRENT(NOTE1)	MINIMUM OUTPUT CURRENT	TOTAL REGULATION(NOTE3)	RIPPLE & NOISE %P-P(NOTE2)	PEAK OUTPUT POWER(NOTE1)
SINGLE OUTPUT MODEL SELECTION CHART								
PPS50-10	+5V	±10% Typical	10A	18A	0A	±3%	±1%	90W Typical
PPS50-11	+12V	±10% Typical	4.2A	7.5A	0A	±3%	±1%	90W Typical
PPS50-12	+15V	±10% Typical	3.3A	5.9A	0A	±3%	±1%	90W Typical
PPS50-13	+24V	±10% Typical	2.1A	3.7A	0A	±3%	±1%	90W Typical
PPS50-14	+48V	±10% Typical	1.05A	1.8A	0A	±3%	±1%	90W Typical
PPS50-15	+36V	±10% Typical	1.4A	2.5A	0A	±3%	±1%	90W Typical
PPS50-17	+3.3V	±10% Typical	13A	27A	1.3A	±5%	±1.5%	90W Typical
DUAL OUTPUT MODEL SELECTION CHART								
PPS50-20	+5 V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	2.5A	4.5A	0.25A	±5%	±1%	
PPS50-21	+5 V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+24V	Fixed	1.1A	1.9A	0.11A	±5%	±1%	
PPS50-22	+5 V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	- 5V	Fixed	5A	9A	0.5A	±10%	±1%	
PPS50-23	+12V	±10% Typical	2.1A	3.7A	0.21A	±5%	±1%	90W Typical
	- 12V	Fixed	2.1A	3.7A	0.21A	±10%	±1%	
PPS50-24	+15V	±10% Typical	1.7A	3.1A	0.17A	±5%	±1%	90W Typical
	- 15V	Fixed	1.7A	3.1A	0.17A	±10%	±1%	
PPS50-25	+3.3V	±10% Typical	6A	10.8A	0.6A	±5%	±1.5%	90W Typical
	+12V	Fixed	2.5A	4.5A	0.25A	±5%	±1%	
PPS50-26	+12V	±10% Typical	2.5A	4.5A	0.25A	±5%	±1%	90W Typical
	+24V	Fixed	0.9A	1.6A	0.09A	±5%	±1%	
PPS50-27Y	+5V	±10% Typical	5A	6.5A	0.5A	±5%	±1%	90W Typical
	+15V	Fixed	2A	2.6A	0.2A	±5%	±1%	
PPS50-28	+12.5V	±10% Typical	3.4A	6.1A	0.34A	±5%	±1%	90W Typical
	+16V	Fixed	0.45A	0.8A	0.05A	±5%	±1%	
PPS50-29	+3.3V	±10% Typical	10A	18A	1A	±5%	±1.5%	90W Typical
	+5V	Fixed	3.4A	6.1A	0.34A	±5%	±1%	
TRIPLE OUTPUT MODEL SELECTION CHART								
PPS50-30	+ 5V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	3A	5.4A	0.3A	±5%	±1%	
	- 5 V	Fixed	0.6A	1.1A	0.06A	±10%	±1%	
PPS50-31	+ 5V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	1.8A	3.2A	0.18A	±5%	±1%	
	-12V	Fixed	0.3A	0.5A	0.03A	±10%	±1%	
PPS50-32	+ 5V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+15V	Fixed	1.4A	2.5A	0.14A	±5%	±1%	
	-15V	Fixed	0.3A	0.5A	0.03A	±10%	±1%	
PPS50-33	+ 5V	±10% Typical	6A	10.8A	0.6A	±5%	±1%	90W Typical
	+15V	Fixed	1A	1.8A	0.1A	±5%	±1%	
	- 5 V	Fixed	1A	1.8A	0.1A	±10%	±1%	
PPS50-34	+ 5V	±10% Typical	6A	10.8A	0.6A	±5%	±1%	90W Typical
	+15V	Fixed	1A	1.8A	0.1A	±5%	±1%	
	-12V	Fixed	0.4A	0.7A	0.04A	±10%	±1%	
PPS50-35	+ 5 V	±10% Typical	4.3A	7.7A	0.43A	±5%	±1%	90W Typical
	+24V	Fixed	1A	1.8A	0.1A	±5%	±1%	
	-12V	Fixed	0.4A	0.7A	0.04A	±10%	±1%	
PPS50-36	+ 5V	±10% Typical	4.3A	7.7A	0.43A	±5%	±1%	90W Typical
	+12V	Fixed	2A	3.6A	0.2A	±5%	±1%	
	- 12V	Fixed	0.4A	0.7A	0.04A	±10%	±1%	
PPS50-37	+ 5V	±10% Typical	4.3A	7.7A	0.43A	±5%	±1%	90W Typical
	+12V	Fixed	1.8A	3.2A	0.18A	±5%	±1%	
	+24 V	Fixed	0.3A	0.5A	0.03A	±10%	±1%	

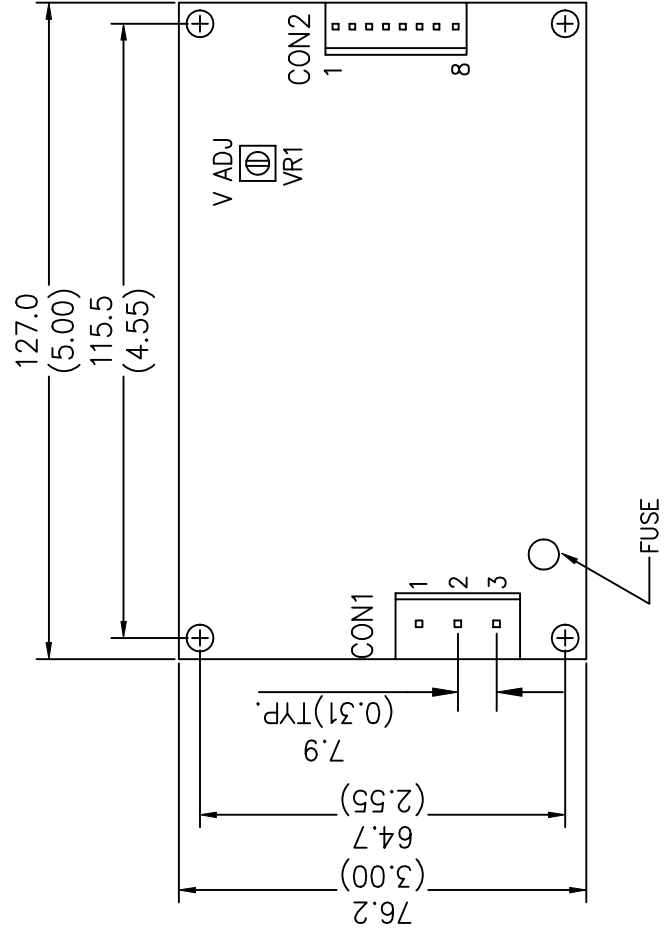
PPS50 SWITCHING MODE 50W OPEN FRAME POWER SUPPLIES

MODEL	OUTPUT VOLTAGE	ADJUSTMENT RANGE	MAXIMUM OUTPUT CURRENT	PEAK OUTPUT CURRENT(NOTE1)	MINIMUM OUTPUT CURRENT	TOTAL REGULATION(NOTE3)	RIPPLE & NOISE %P-P(NOTE2)	PEAK OUTPUT POWER(NOTE1)
TRIPLE OUTPUT MODEL SELECTION CHART								
PPS50-38	+15V	±10% Typical	1.5A	2.7A	0.15A	±5%	±1%	90W Typical
	-15V	Fixed	1.5A	2.7A	0.15A	±5%	±1%	
	+5V	Fixed	1A	1.8A	0.1A	±10%	±1%	
PPS50-39	+12V	±10% Typical	1A	1.8A	0.1A	±5%	±1%	90W Typical
	-12V	Fixed	1A	1.8A	0.1A	±5%	±1%	
	+28V	Fixed	1A	1.8A	0.1A	±10%	±1%	
QUAD OUTPUT MODEL SELECTION CHART								
PPS50-40	+5V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	1.6A	2.8A	0.16A	±5%	±1%	
	-12V	Fixed	0.3A	0.5A	0.03A	±10%	±1%	
	-5V	Fixed	0.3A	0.5A	0.03A	±10%	±1%	
PPS50-41	+5V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	1.4A	2.5A	0.14A	±5%	±1%	
	-5V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
	-12V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
PPS50-42	+5V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	0.8A	1.4A	0.08A	±5%	±1%	
	-15V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
	+15V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
PPS50-43	+5V	±10% Typical	2.8A	5A	0.28A	±5%	±1%	90W Typical
	+12V	Fixed	1.2A	2.1A	0.12A	±5%	±1%	
	-12V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
	+15V	Fixed	1A	1.8A	0.1A	±10%	±1%	
PPS50-44	+5V	±10% Typical	2.8A	5A	0.28A	±5%	±1%	90W Typical
	+12V	Fixed	0.5A	0.9A	0.05A	±5%	±1%	
	-12V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
	+48V	Fixed	0.5A	0.9A	0.05A	±10%	±1%	
PPS50-45Y	+5V	±10% Typical	5A	6.5A	0.5A	±5%	±1%	90W Typical
	+12V	Fixed	0.5A	0.65A	0.05A	±5%	±1%	
	-12V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
	+24V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
PPS50-46Y	+5V	±10% Typical	5A	6.5A	0.5A	±5%	±1%	90W Typical
	+15V	Fixed	0.5A	0.65A	0.05A	±5%	±1%	
	-15V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
	+48V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
PPS50-47Y	+5V	±10% Typical	2.5A	3.5A	0.25A	±5%	±1%	90W Typical
	+12V	Fixed	0.9A	1.6A	0.09A	±5%	±1%	
	-12V	Fixed	0.9A	1.6A	0.09A	±10%	±1%	
	+36V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
PPS50-48Y	+5V	±10% Typical	5A	6.5A	0.5A	±5%	±1%	90W Typical
	+15V	Fixed	0.5A	0.65A	0.05A	±5%	±1%	
	-15V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
	+24V	Fixed	0.5A	0.65A	0.05A	±10%	±1%	
PPS50-49Y	+3.3V	±10% Typical	5A	9A	0.5A	±5%	±1%	90W Typical
	+5V	Fixed	3A	5.4A	0.3A	±5%	±1%	
	+12V	Fixed	1.5A	5.4A	0.15A	±10%	±1%	
	-5V	Fixed	1A	2.8A	0.1A	±10%	±1%	

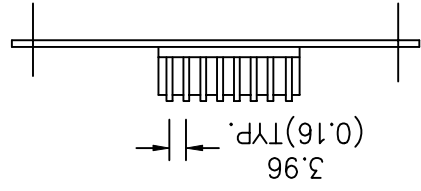
- NOTES:** 1) Peak loads for lasting <30 seconds with a maximum 10% duty cycle are acceptable. Please contact us if need special peak load.
2) Maximum peak to peak noise expressed as a percentage of output voltage, 20MHz bandwidth, 0.1 μF and 47 μF Cap. on outputs.
3) Loading test conditions are set for all outputs at minimum, middle and maximum of loads. Special cross loading requirement is welcomed.
4) Detailed engineering specification of each model is available for inquiry.
5) Special output voltage/current inquiry is welcomed.
6) Specifications subject to change without notice.
7) 25% derated if 24 VDC input version; 50% derated if 12 VDC input version.

PPS50

$$\text{MAXIMUM COMPONENT HEIGHT} = \frac{25.4}{1.00} \begin{matrix} +2.54 \\ -0 \\ +.10 \\ -0 \end{matrix}$$



CON1=CONNECTOR,MOLEX#09-65-2058(OR EQUIVALENT)
 (MATING CONECT.=MOLEX#09-50-3051)
 CON2=CONNECTOR,MOLEX#09-65-2088(OR EQUIVALENT)
 (MATING CONECT.=MOLEX#09-50-3081)
 ALL MATING TERMINAL=MOLEX#08-50-0106(OR EQUIVALENT)



CON1 (CONNECTORS) CONFIGURATION

1	2	3
FG	NEUT(-)	LINE(+)

CON2 (CONNECTORS) CONFIGURATION FOR V4 ISOLATED

Multiple Output	1	2-3	4-5	6	7	8
	V2	V1	RET	V3	V4	V4RET

CON2 (CONNECTORS) CONFIGURATION FOR V4 POSITIVE

Multiple Output	1	2-3	4-5	6	7	8
	V2	V1	RET	V3	V4(+)	RET

CON2 (CONNECTORS) CONFIGURATION FOR V4 NEGATIVE

Multiple Output	1	2-3	4-5	6	7	8
	V2	V1	RET	V3	RET	V4(-)

CON2 (CONNECTORS) CONFIGURATION

Single Output	1-3	4-6	7-8
	V1(+)	RET(-)	NC

TOLERANCE : $\frac{\text{mm} \pm 0.5}{(\text{inch}) \pm 0.02}$

UNIT: $\frac{\text{mm}}{(\text{inch})}$