

- Universal AC input
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Fixed switching frequency at PFC:67KHz  
PWM:134KHz(Optional)



Model Number	Output Volts	Output Amps	Ripple & Noise	Line Reg	Load Reg	Volt Tolerance	Min Load
<b>Quad OUTPUT</b>							
PPQ-1003A	3.3 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	0~15Amps
	5 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	2.0~15Amps
	12 Volts(DC)	2.0 Amps	150mVpk-pk	±2.0%	±6.0%	±6.0%	0.2~3.0Amps
	-5Volts(DC)	0.3 Amps	100mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
PPQ-1003B	3.3 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	0~15Amps
	5 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	2.0~15Amps
	12 Volts(DC)	2.0 Amps	150mVpk-pk	±2.0%	±6.0%	±6.0%	0.2~3.0Amps
	-12 Volts(DC)	0.3 Amps	120mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
PPQ-1003C	3.3 Volts(DC)	10Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	0~15Amps
	5 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	2.0~15Amps
	15 Volts(DC)	1.5 Amps	180mVpk-pk	±2.0%	±6.0%	+10,-5%	0.2~3.0Amps
	-15 Volts(DC)	0.3 Amps	150mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps
PPQ-1003D	3.3 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	0~15Amps
	5 Volts(DC)	10 Amps	100mVpk-pk	±1.0%	±2.0%	±3.0%	2~15Amps
	12 Volts(DC)	2.0 Amps	150mVpk-pk	±2.0%	±6.0%	±6.0%	0.2~3.0Amps
	24 Volts(DC)	0.3 Amps	150mVpk-pk	±1.0%	±1.0%	±6.0%	0~1.0Amps

## 100W Quad Output with PFC Function

## PPQ1003 series

### INPUT SPECIFICATIONS

Input Voltage Range	90-264VAC / 127-370 Volts(DC)
Frequency Range	47~63Hz
Inrush Current, typ: (cold start)	40 Amps
Input Current	1.65Amps @115VAC 0.85Amps @230VAC
Leakage current	< 1.0mAmps / 240VAC
Power Factor	PF >0.95 / 230VAC > 0.98 / 115VAC

### OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	See Selection Chart
Load Regulation	See Selection Chart
Voltage Tolerance (Note 2)	See Selection Chart
Ripple/Noise (Note 1)	See Selection Chart
Hold Up Time @ FL	18mS
Setup, Rise Time @ FL	800mS, 50mS
Over Voltage Protection	3.3Volts(DC): 3.6~4.3Volts(DC) 5Volts(DC): 5.75~6.75Volts(DC) Shutdown o/p voltage, re-power
Over Current Protection	105~135% rated output power Constant current limiting, auto recover
DC Voltage Adjust	3.3Volts(DC): 3.14~3.63Volts(DC) 5Volts(DC): 4.75~5.5Volts(DC)

### GENERAL SPECIFICATIONS

Safety	UL60950-1 TUV EN60950-1 Approved
Insulation Resistance	≥ 100MΩ / 500Volts(DC)
EMI	Compliance to EN55022B (CISPR22B)
Harmonic Current	Compliance to EN61000-3-2,-3
Efficiency	72%

Isolation	3000VAC Input - Output 1500VAC Input - Ground 500VAC Output - Ground
EMS	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, light industry level, criteria A

### ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-10°C to +60°C (See Derate Curve)
Storage Temperature	-40°C to +85°C, 10~95% RH
Relative Humidity	20 to +90% RH non cond
Temperature Coefficient	±0.03% / °C (0-50°C)
MTBF	150.6K Hrs min, MIL-HDBK-217F (25°C)
Vibration	10~500Hz, 2G10min./1cycle, period for 60min. each along X, Y, Z axes

### PHYSICAL SPECIFICATIONS

Size	Millimeters 177.8 x 107.95 x 38 Inches 7" x 4.25" x 1.50"
Weight	21.87 oz (620g)

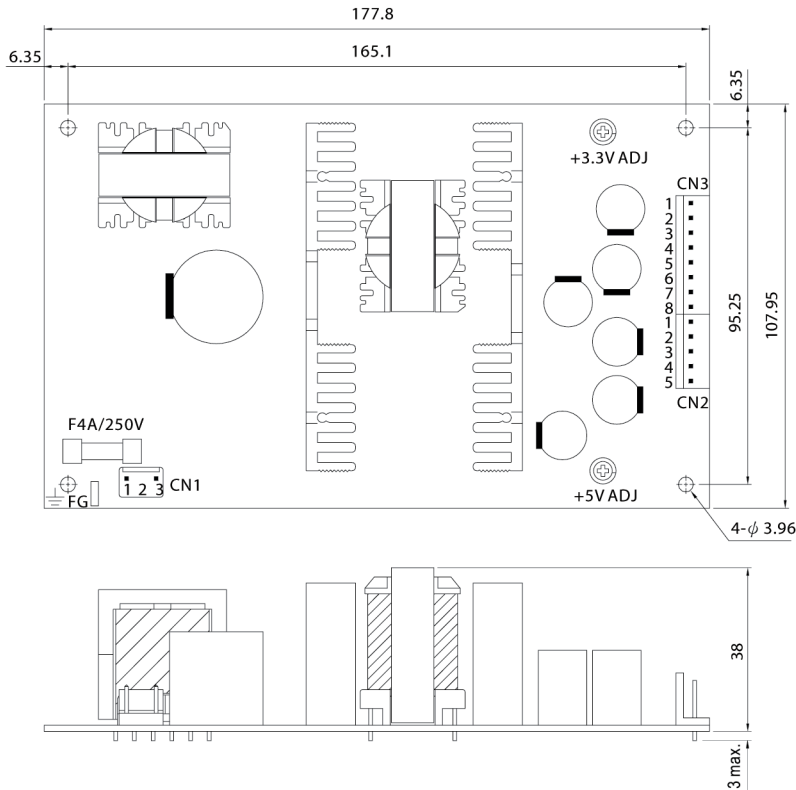
### NOTE

1. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47 uf parallel capacitor.
2. Tolerance: includes set up tolerance, line regulation and load regulation.

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

### Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B3P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/N		

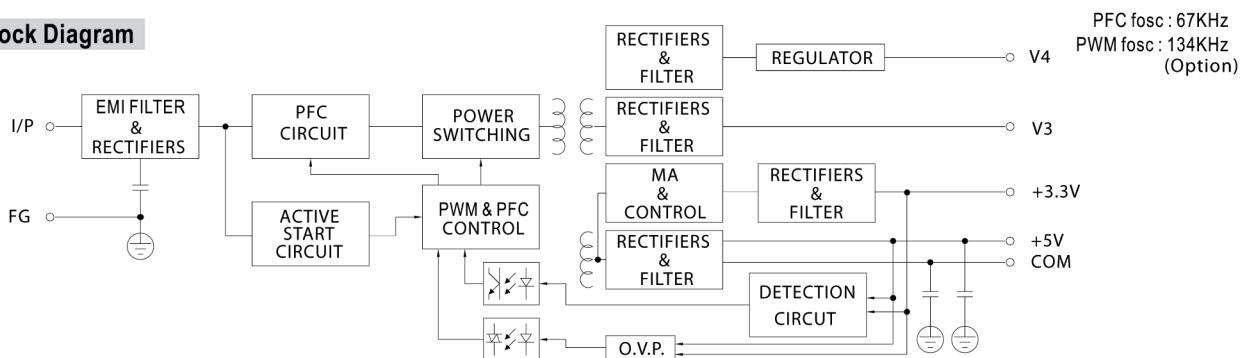
DC Output Connector (CN2) : JST B5P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2,3	V2	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
4	V3		
5	V4		

DC Output Connector (CN3) : JST B8P-VH or equivalent

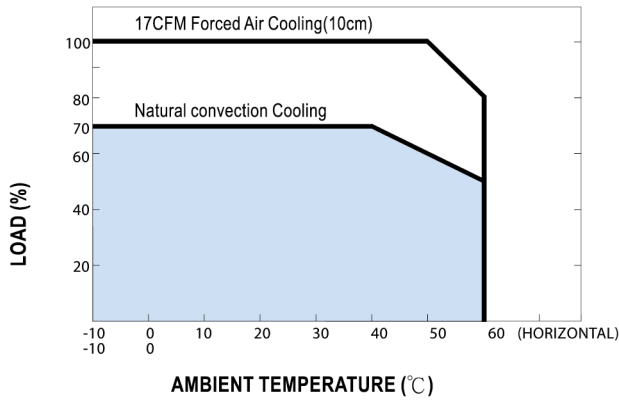
Pin No.	Assignment	Mating Housing	Terminal
1~3	V1	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
4~8	COM		

### Block Diagram



100W Quad Output with PFC Function

■ Derating Curve



■ Output Derating VS Input Voltage

