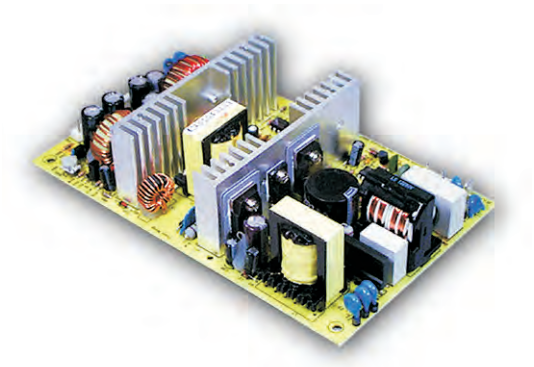
100W Quad Output with PFC Function

PPQ-100 series



■ Features :

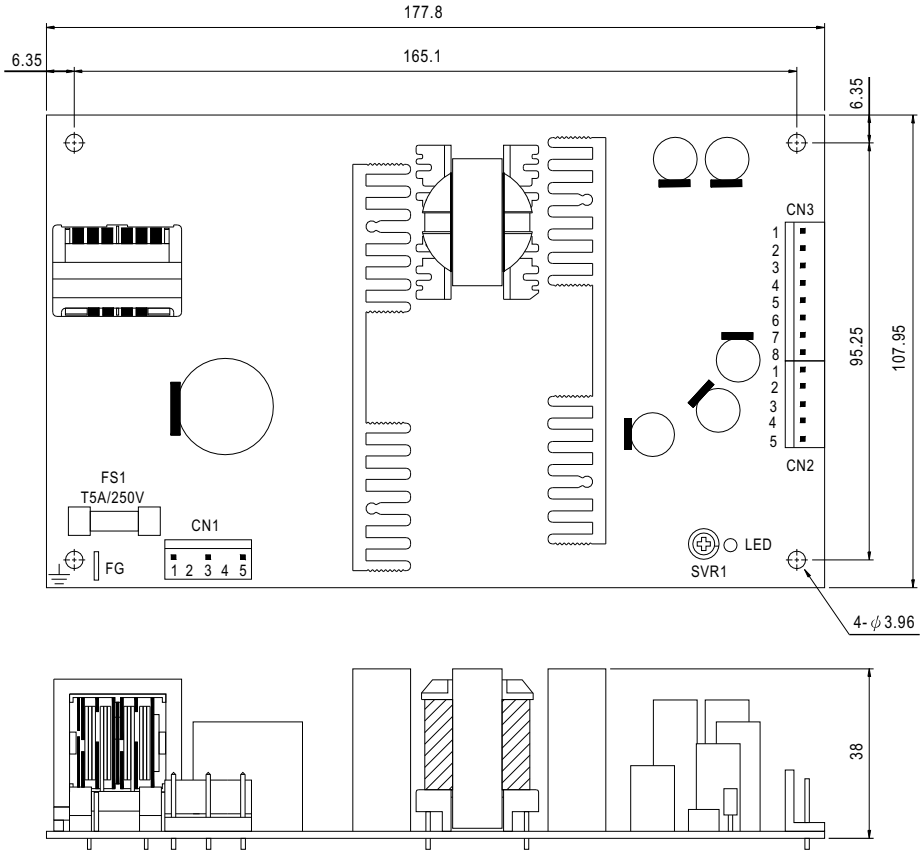
- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections:Short circuit/Over load/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 70KHz(Optional)
- 3 years warranty

SPECIFICATION

MODEL		PPQ-100B				PPQ-100C				PPQ-100D			
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH4
	DC VOLTAGE	5V	12V	-12V	-5V	5V	15V	-15V	-5V	5V	24V	12V	-12V
	RATED CURRENT	10A	3.4A	0.6A	0.6A	10A	2.6A	0.6A	0.6A	8A	2A	0.6A	0.6A
	CURRENT RANGE	2 ~ 15A	0.3 ~ 4A	0 ~ 1A	0 ~ 1A	2 ~ 15A	0.3 ~ 4A	0 ~ 1A	0 ~ 1A	2 ~ 10A	0.3 ~ 4A	0 ~ 1A	0 ~ 1A
	RATED POWER (max.)	101W				101W				102.4W			
	RIPPLE & NOISE (max.) Note.2	100mVp-p	150mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	100mVp-p	100mVp-p	100mVp-p	200mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	CH1:4.75 ~ 5.5V											
	VOLTAGE TOLERANCE Note.3	±3.0%	±8.0%	±5.0%	±5.0%	±3.0%	+10,-6%	±5.0%	±5.0%	±3.0%	±8.0%	±5.0%	±5.0%
	LINE REGULATION	±1.0%	±2.0%	±2.0%	±1.0%	±1.0%	±2.0%	±2.0%	±1.0%	±1.0%	±2.0%	±2.0%	±1.0%
	LOAD REGULATION	±2.0%	±6.0%	±2.0%	±2.0%	±2.0%	±6.0%	±2.0%	±2.0%	±2.0%	±6.0%	±2.0%	±2.0%
	SETUP, RISE TIME	800ms, 50ms/230VAC 1200ms, 50ms/115VAC at full load											
	HOLD TIME (Typ.)	24ms/230VAC 24ms/115VAC at full load											
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~370VDC											
	FREQUENCY RANGE	47 ~ 63Hz											
	POWER FACTOR (Typ.)	PF>0.95/230VAC PF>0.98/115VAC at full load											
	EFFICIENCY(Typ.)	75%				76%				78%			
	AC CURRENT (Typ.)	1.65A/115VAC 0.85A/230VAC											
	INRUSH CURRENT (Typ.)	COLD START 30A											
	LEAKAGE CURRENT	<3.5mA /240VAC											
PROTECTION	OVER LOAD	105% ~ 135% rated output power											
		Protection type : Hiccup mode, recovers automatically after fault condition is removed											
	OVER VOLTAGE	CH1: 5.75 ~ 6.75V											
		Protection type : Shut down o/p voltage, re-power on to recover											
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃(Refer to output load derating curve)											
	WORKING HUMIDITY	20 ~ 90% RH non-condensing											
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH											
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)											
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes											
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 Approved											
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC											
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC											
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B											
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3											
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A											
OTHERS	MTBF	162.5K hrs min. MIL-HDBK-217F (25℃)											
	DIMENSION	177.8*107.95*38mm (L*W*H)											
	PACKING	0.62Kg; 24pcs/15.9Kg/1.34CUFT											
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.												

■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B5P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG ⏚	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2,4	No Pin		
3	AC/L		
5	AC/N		

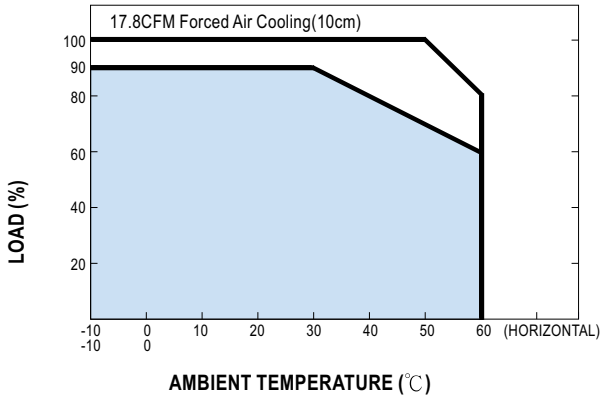
DC Output Connector (CN2) : JST B5P-VH or equivalent

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

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

Pin No.	Assignment	Mating Housing	Terminal
1~4	V1	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
5~8	COM		

■ Derating Curve



■ Output Derating VS Input Voltage