



Features

- 3.8" x 6.8" footprint, U-Bracket
- ITE & Medical Dual Safety Approvals
- Built-in Active PFC



Model Selection

Model No.	Output Rail	Load				Initial Accuracy*	Ripple & Noise*	Load Regulation	Efficiency
		Min	Rated	Max*	Peak*				
SNP-Z156	+5V	0A	28A			+4.95V~+5.05V	1%	±1%	82%
SNP-Z157-1	+12V	0A	13A		17.5A	+11.9V~+12.1V	1%	±1.5%	85%
SNP-Z158-1	+15V	0A	10A		14A	+14.85V~+15.15V	1%	±1.5%	85%
SNP-Z159-1	+24V	0A	6.5A		8.8A	+23.76V~+24.24V	1%	±1.5%	86%
SNP-Z15T	+48V	0A	3.2A		4.6A	+47.6V~+48.4V	1%	±1%	88%
SNP-Z157	+5V	0A	2A			+4.90V~+5.10V	1%	±1.5%	84%
	+12V	0A	12A		17.5A	+11.9V~+12.1V	1%	±1.5%	
SNP-Z158	+5V	0A	2A			+4.90V~+5.10V	1%	±1.5%	85%
	+15V	0A	9.6A		14A	+14.85V~+15.15V	1%	±1.5%	
SNP-Z159	+5V	0A	2A			+4.90V~+5.10V	1%	±1.5%	86%
	+24V	0A	6A		8.8A	+23.76V~+24.24V	1%	±1.5%	
SNP-Z153	+5V	0A	10A	13A		+4.90V~+5.10V	1%	±3%	83%
	+12V	0A	7A	10A	15A	+11.4V~+12.6V	1%	±3%	
SNP-Z151	+5V	0A	10A	13A		+4.90V~+5.10V	1%	±3%	83%
	+12V	0A	7A	10A	15A	+11.4V~+12.6V	1%	±3%	
SNP-Z15F	+5V	0A	8A	12A		+4.90V~+5.10V	1%	±3%	84%
	+12V	0A	2A			+11.4V~+12.6V	100mV	±5%	
	-12V	0A	0.5A			-11.4V~-12.6V	100mV	±5%	
SNP-Z15E	+24V	0A	3A	4A	7A	+22.8V~+25.2V	100mV	±3%	81%
	+3.3V	0A	10A			+3.2V~+3.4V	50mV	±3%	
	+5V	0A	8A			+4.95V~+5.05V	1%	±3%	
	+12V	0A	3.5A			+11.4V~+12.6V	1%	±5%	
	-12V	0A	0.5A			-11.2V~-12.6V	1%	±5%	

General Specifications

– Input & Output –		– EMC –	
Input voltage range	90VAC to 264VAC	Emission	FCC/CISPR, level B
Label voltage	100VAC to 240VAC	Harmonic currents	EN61000-3-2, class D
Nominal line voltage	115VAC / 230VAC	Voltage flicker	EN61000-3-3
Input frequency range	47Hz to 63Hz	ESD	EN61000-4-2, criterion A
Inrush current*	<30A at 115VAC, <60A at 230VAC		6kV contact, 8kV air discharge
Line regulation	<±0.5%	Radiated immunity	EN61000-4-3
Hold-up time	20ms typ.		10V/M with 80% AM, criterion A
		EFT/Burst	EN61000-4-4, 2kV, criterion A
– Protection –		Surge	EN61000-4-5, 1kV L-L, 2kV L-E, criterion A
Over Voltage*	Latch-off	Conducted immunity	EN61000-4-6, 10V with 80% AM, criterion A
Over Load / Short	Auto-recovery	MS	EN61000-4-8, 10A/m, criterion A
		Voltage dips	EN61000-4-11
– Environmental –			30% dips 10ms, criterion A
Operating temperature	0°C to +70°C		60% dips 100ms, criterion C
Cooling	Convection cooling		95% dips 5000ms, criterion C
Power derating	Refer to Power Derating Curve		
Storage temperature	-40°C to +75°C	– Safety –	
Relative humidity	5% to 90% RH, non-condensing	Approvals	60950-1, 2 nd edition (TUV, UL, CSA)
Operating altitude	0 to 2000m		60601-1, 2 nd edition (TUV, UL, CSA)
			CB Report, CE Mark

Notes

- All specifications without special notices are defined at nominal line, rated load and 25°C.
- Inrush current is defined at 25°C cold start and EMI capacitors are excluded.
- Over voltage protection mode is defined at 60% rated load.
- Initial output voltage is set at 60% rated load and 115VAC input.
- Peak load can last 8 sec with 10% duty cycle and average power < rated load.
- Ripple & Noise is defined with 20MHz BWL oscilloscope and 1X probe with 0.47uF output capacitor for each output. For SNP-Z156, an extra 47uF output capacitor is required.
- For SNP-Z151/3, max combination load of +5V and +12V is 134W/continuous and 210W/peak.
- For SNP-Z15F, max combination load of +5V and +24V is 110W/continuous and 180W/peak.
- All specifications subject to change without notice.
- This datasheet is only for model selection. Please contact sales@skynetpower.com.tw for formal specification.

Output Pin

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12
SNP-Z156	+5V	+5V	+5V	+5V	+5V	+5V	GND	GND	GND	GND	GND	GND
SNP-Z153	NC	+5V	+5V	+5V	GND	GND	GND	GND	GND	+12V	+12V	+12V
SNP-Z151	-12V	+5V	+5V	+5V	GND	GND	GND	GND	GND	+12V	+12V	+12V
SNP-Z15E	+12V	-12V	+3.3V	+3.3V	+3.3V	GND	GND	GND	GND	GND	+5V	+5V
SNP-Z15F	+12V	-12V	+5V	+5V	+5V	+5V	GND	GND	GND	GND	GND	+24V
SNP-Z157	+5V	GND	GND	GND	GND	+12V	+12V	+12V	+12V			
SNP-Z158	+5V	GND	GND	GND	GND	+15V	+15V	+15V	+15V			
SNP-Z159	+5V	GND	GND	GND	GND	+24V	+24V	+24V	+24V			
SNP-Z15T	NC	GND	GND	GND	GND	+48V	+48V	+48V	+48V			
SNP-Z157-1	NC	GND	GND	GND	GND	+12V	+12V	+12V	+12V			
SNP-Z158-1	NC	GND	GND	GND	GND	+15V	+15V	+15V	+15V			
SNP-Z159-1	NC	GND	GND	GND	GND	+24V	+24V	+24V	+24V			

Connector type*

- TB1 AC input : Molex 5277-02A
- TB2 DC output : Molex 5273-12A (SNP-Z156/3/1/E/F)
- TB3 LED : Molex 5273-09A (other models)
- TB4 FAN : Molex 5045-02A
- TB5 Remote sense : Molex 5045-02A (only for SNP-Z156)

Dimensions

- WxLxH : 3.8" x 6.8" x 1.5"
96.5 x 172.7 x 38.1 (mm)

Packing

- Net weight : 555g approx./unit
- Carton size (mm) : 453(L) x 362(W) x 279(H)
- Quantity : 20 units / carton
- Gross weight : 13.7kg approx./carton

Notes

- For all connectors equivalent types from other vendors could be used.
- Fan output is +12V with max 0.1A in SNP-Z158/ Z158-1, and 0.25A in other models.
- Dimensions in left graph are shown in mm.
- Tolerance is ± 0.4 mm for distance between mounting holes, and ± 0.8 mm for other dimension.
- This product is RoHS compliant.

Power Derating Curve

