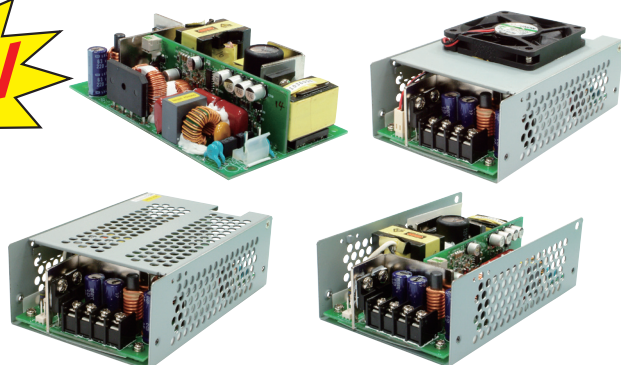




Features

- 3" x 5" footprint (open frame type)
- High efficiency up to 90%
- High Power Density up to 9.4W/in³
- ITE & Medical models available
- Optional U-Bracket & Cover
- Built-in Active PFC
- Green Power

Model Selection



Model No. (ITE Models)*	Output Rail	Load				Initial Accuracy*	Ripple & Noise	Rated Load Efficiency
		Min	Rated	Max	Peak*			
SNP-G167 (-U) (-C)	+12V	0A	13.3A	20.0A	26.6A	+11.9V~+12.1V	120mV	90%
SNP-G168 (-U) (-C)	+15V	0A	10.66A	16.0A	21.3A	+14.9V~+15.1V	150mV	90%
SNP-G165 (-U) (-C)	+18V	0A	8.88A	13.33A	17.8A	+17.9V~+18.1V	150mV	90%
SNP-G169 (-U) (-C)	+24V	0A	6.66A	10.0A	13.3A	+23.9V~+24.1V	200mV	90%
SNP-G16G (-U) (-C)	+28V	0A	5.7A	8.55A	11.4A	+27.9V~+28.1V	200mV	90%
SNP-G16J (-U) (-C)	+36V	0A	4.45A	6.66A	8.9A	+35.8V~+36.2V	250mV	90%
SNP-G16T (-U) (-C)	+48V	0A	3.35A	5.0A	6.67A	+47.8V~+48.2V	250mV	90%

SNP-G207 (-U)	+12V	0A	16.5A	25.0A	33.0A	+11.9V~+12.1V	120mV	90%
SNP-G208 (-U)	+15V	0A	12.0A	18.0A	22.5A	+14.9V~+15.1V	150mV	90%
SNP-G205 (-U)	+18V	0A	11.1A	16.6A	22.3A	+17.9V~+18.1V	150mV	90%
SNP-G209 (-U)	+24V	0A	8.4A	12.5A	16.7A	+23.9V~+24.1V	200mV	90%
SNP-G20G (-U)	+28V	0A	7.2A	10.7A	13.0A	+27.9V~+28.1V	200mV	90%
SNP-G20J (-U)	+36V	0A	5.6A	8.3A	11.0A	+35.8V~+36.2V	250mV	90%
SNP-G20T (-U)	+48V	0A	4.2A	6.3A	8.4A	+47.8V~+48.2V	250mV	90%

SNP-G207 -C	+12V	0A	15.0A	25.0A	33.0A	+11.9V~+12.1V	120mV	90%
SNP-G208 -C	+15V	0A	12.0A	18.0A	22.5A	+14.9V~+15.1V	150mV	90%
SNP-G205 -C	+18V	0A	10.0A	16.6A	22.3A	+17.9V~+18.1V	150mV	90%
SNP-G209 -C	+24V	0A	7.5A	12.5A	16.7A	+23.9V~+24.1V	200mV	90%
SNP-G20G -C	+28V	0A	6.42A	10.7A	13.0A	+27.9V~+28.1V	200mV	90%
SNP-G20J -C	+36V	0A	5.0A	8.3A	11.0A	+35.8V~+36.2V	250mV	90%
SNP-G20T -C	+48V	0A	3.75A	6.3A	8.4A	+47.8V~+48.2V	250mV	90%

SNP-E307	+12V	0A	25.0A			+11.9V~+12.1V	120mV	89%
SNP-E308	+15V	0A	18.0A			+14.9V~+15.1V	150mV	89%
SNP-E305	+18V	0A	16.6A			+17.9V~+18.1V	180mV	89%
SNP-E309	+24V	0A	12.5A			+23.9V~+24.1V	200mV	89%
SNP-E30G	+28V	0A	10.7A			+27.9V~+28.1V	250mV	89%
SNP-E30J	+36V	0A	8.3A			+35.8V~+36.2V	250mV	89%
SNP-E30T	+48V	0A	6.3A			+47.8V~+48.2V	250mV	89%

Notes

- All specifications without special notices are defined at nominal line, rated load and 25°C.
- For SNP-G16/G20, models with suffix "-U" are U-Bracket type; "-C" are U-Bracket+Cover type; otherwise are open frame type.
- To order medical model, please add suffix "-M" or "M" in the end of the ITE model name, e.g. SNP-G207-M, SNP-G168-UM.
- Initial accuracy is set at 60% rated load and 115VAC input.
- Peak load can last 5 seconds with 10% duty cycle and average power < rated load.
- Ripple & Noise is defined with 15MHz BWL oscilloscope and 1X probe with 0.47uF output capacitor.
- Average efficiency is the average efficiency value of 25%, 50%, 75% and 100% rated load at nominal line input.
- All specifications subject to change without notice.
- This datasheet is only for model selection. Please contact sales@skynetpower.com.tw for formal specification.

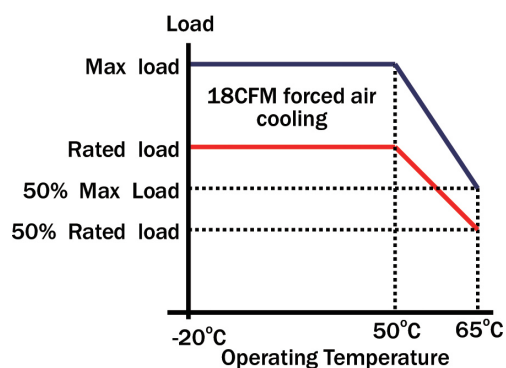
General Specifications

— 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
Average efficiency*	>87% (SNP-G16, SNP-G20)	Radiated immunity	EN61000-4-3
No load input power*	<0.5W (SNP-G16, SNP-G20)		10V/M with 80% AM, criterion A
Line/Load regulation	<±1%	EFT/Burst	EN61000-4-4, 2kV, criterion A
Hold-up time	20ms typ. (SNP-G16, SNP-G20) 16ms typ. (SNP-E30)	Surge	EN61000-4-5
			1kV L-L, 2kV L-E, criterion A
		Conducted immunity	EN61000-4-6
			10V with 80% AM, criterion A
— Protection MODE —		MS	EN61000-4-8, 10A/m, criterion A
Over Voltage*	Latch-off	Voltage dips	EN61000-4-11
Over Load/Short	Auto-recovery		30% dips 10ms, criterion A
			60% dips 100ms, criterion C
			95% dips 5000ms, criterion C
— Environmental —		— Safety —	
Operating temperature	-20°C to +65°C	Approvals	60950-1, 2 nd edition (TUV, UL, CSA)
Cooling	Convection for rated load 18CFM forced air for max load		60601-1, 3 rd edition (TUV, UL, CSA)
Power derating	Refer to Power Derating Curve		CB Report, CE Mark, RM Report/File
Storage temperature	-40°C to +85°C		
Relative humidity	5% to 95% RH, non-condensing		
Operating altitude	0 to 3000m		
MTBF*	>TBD Mhr		

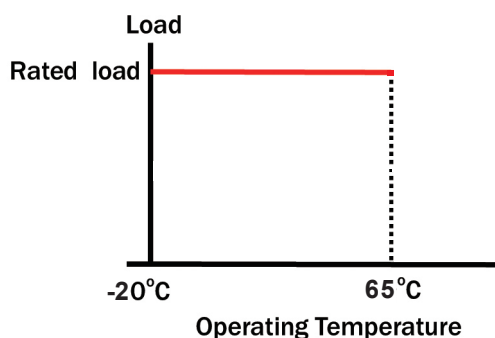
Notes

- 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.
- Average efficiency is the average efficiency value of 25%, 50%, 75% and 100% rated load at nominal line input.
- No load input power is defined when Fan is disconnected.
- MTBF is calculated according to MIL-HDBK-217F at rated load / nominal line input and 50°C ambient temperature.
- All specifications subject to change without notice.

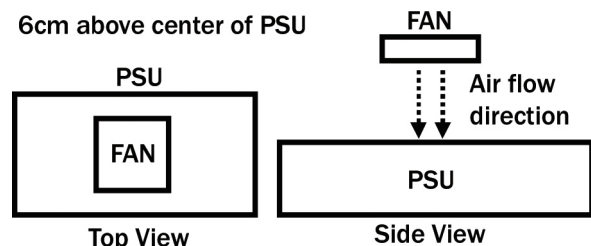
Power Derating Curve (SNP-G16/G20)



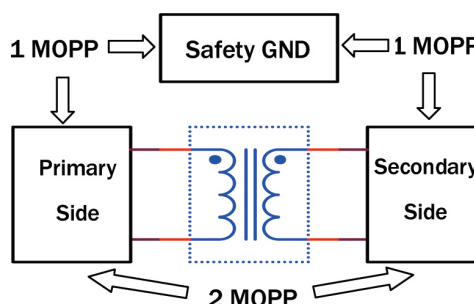
Power Derating Curve (SNP-E30)



Max. Load Fan Location (SNP-G16/G20)



Medical Isolation Grade



Output Pin (TB2)

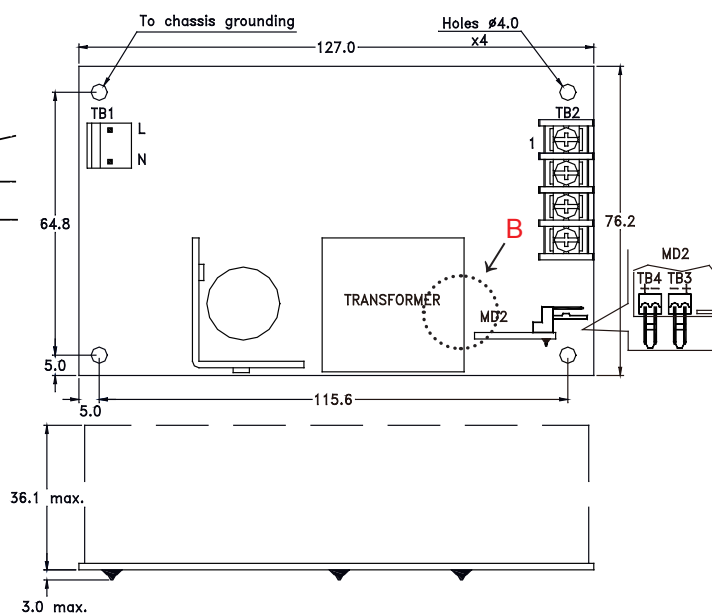
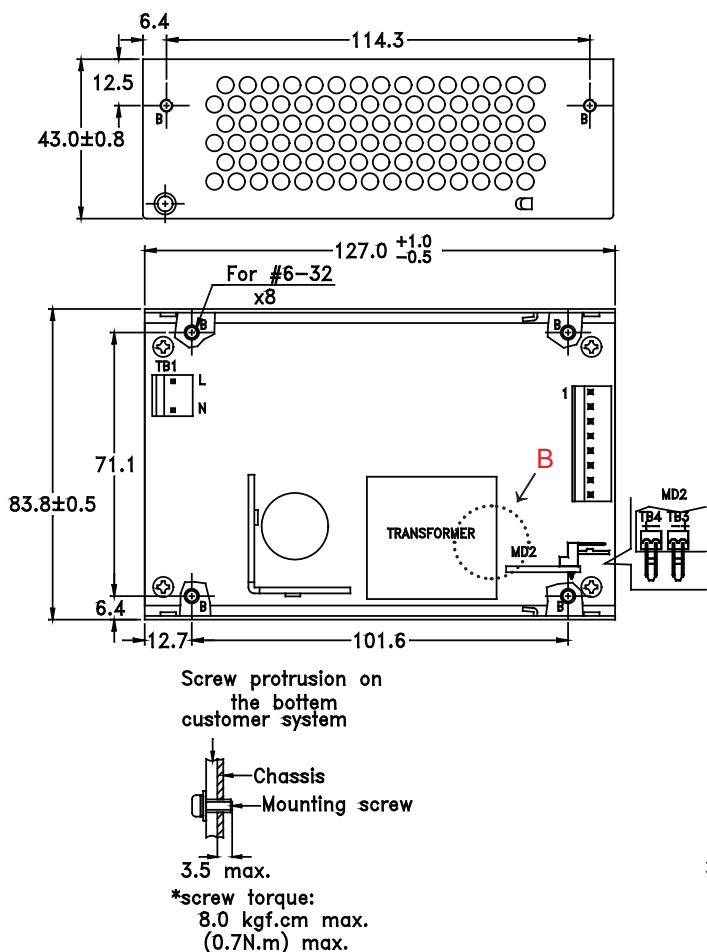
Terminal Blocks	1		2		3		4	
Molex type	1	2	3	4	5	6	7	8
Pin assignment	+V				GND			

Connector type*

- TB1 AC input : Molex 5277-02A
- TB2 DC output : Terminal Blocks
(Vo≤+18V in SNP-G20, E30)
(Vo=+12V in SNP-G16)
: Molex 5273-08A
(Other models)
- TB3 Fan output* : Molex 5046-02A
- TB4 Remote sense : Molex 5046-02A
(Vo≤+18V in SNP-G16, E30)
(Vo≤+28V in SNP-G20)

Notes

- For all connectors, equivalent types from other vendors could be used.
- To use fan output, main output should have 20W min load.
Fan output is +12V with max 0.15A.
- In SNP-E30, Fan output is connected to built-in Fan.
- This product is RoHS compliant.



U-Bracket Type

Dimensions

- WxLxH : 3.3" x 5" x 1.7"
83.8 x 127.0 x 43.0 (mm)
Fits 1U Height

Packing

- Net weight : 539g approx./unit
- Carton size (mm) : 384(L) x 339(W) x 327(H)
- Quantity : 24 units / carton
- Gross weight : 15.3kg approx./carton

Open Frame Type

Dimensions

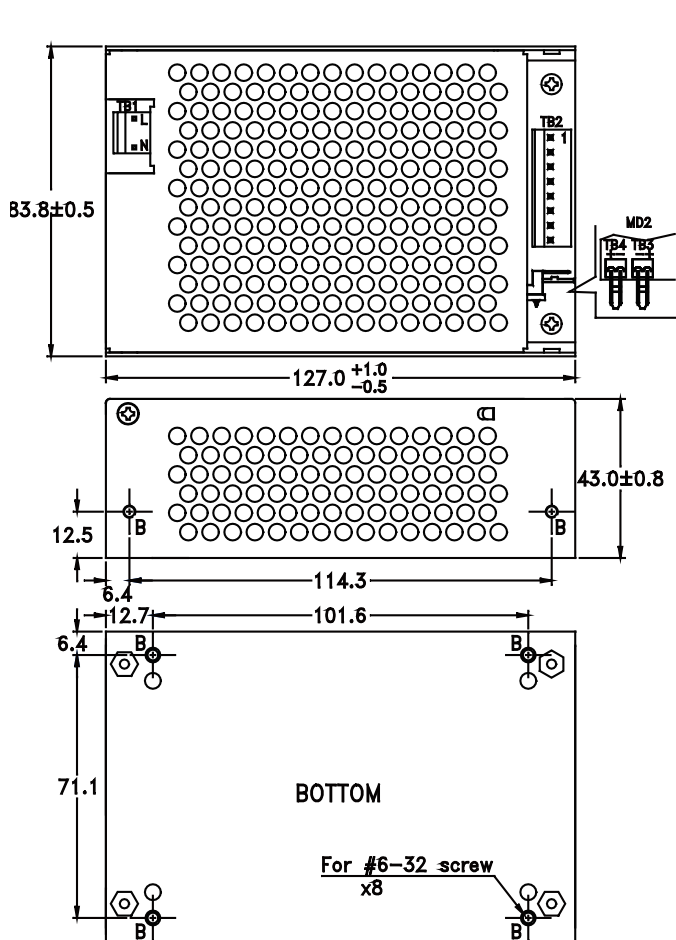
- WxLxH : 3" x 5" x 1.42"
76.2 x 127.0 x 36.1 (mm)

Packing

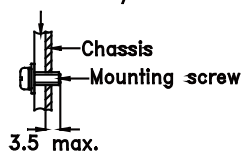
- Net weight : 353g approx./unit
- Carton size (mm) : 384(L) x 339(W) x 327(H)
- Quantity : 36 units / carton
- Gross weight : 15kg approx./carton

Notes

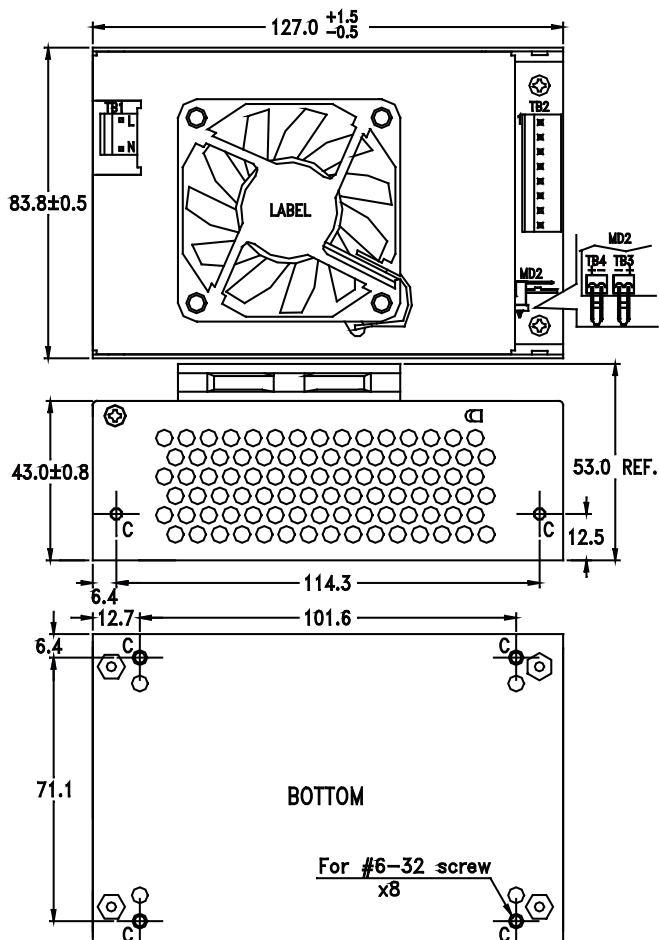
- Dimensions in graphs above are shown in mm.
- Tolerance for dimension is ± 0.4 mm.
- Product height of Open frame and U-Bracket type is defined excluding Transformer fly-wire (Area B in the mechanical graph).



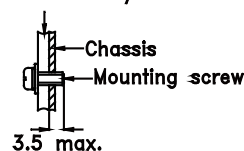
Screw protrusion on the bottom customer system



*screw torque:
8.0 kgf.cm max.
(0.7N.m) max.



Screw protrusion on the bottom customer system



*screw torque:
8.0 kgf.cm max.
(0.7N.m) max.

U-Bracket+Cover Type

Dimensions

- WxLxH : 3.3" x 5" x 1.7"
83.8 x 127.0 x 43.0 (mm)
Fits 1U Height

Packing

- Net weight : 539g approx./unit
- Carton size (mm) : 384(L) x 339(W) x 327(H)
- Quantity : 24 units / carton
- Gross weight : 16.3kg approx./carton

SNP-E30

Dimensions

- WxLxH : 3.3" x 5" x 2.08"
83.8 x 127.0 x 53.0 (mm)

Packing

- Net weight : 580g approx./unit
- Carton size (mm) : 384(L) x 339(W) x 327(H)
- Quantity : 24 units / carton
- Gross weight : 16kg approx./carton

Notes

- Dimensions in graphs above are shown in mm.
- For SNP-E30, Product Length is defined excluding fan cable.
- Tolerance for dimension is ±0.4mm