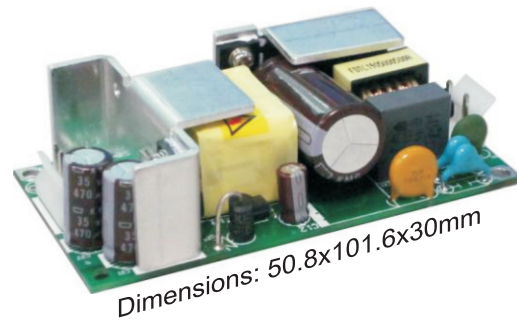


## P/N: N1080MG-12

80W 12VDC Output

### Features

- \* 80W with forced air cooling  
60W convection-cooled
- \* Compact size 2 x 4 inch
- \* Class I & Class II construction
- \* Meets EMI CISPR/FCC class B
- \* No-load power consumption < 0.5W
- \* Optional +5Vsb & Remote on/off function



### Output Specification

Output Voltage	Mini. Output Current	Rated Output Current	Max Output Current	Line Regulation (Note 5)	Load Regulation (Note 5)	Ripple & Noise p-p (Note 1)	Initial Setting Accuracy (Note 2)
+12V	0A	5A	6.66A	±1%	±1%	±1%	±1%
+5Vsb (Note 3)	0A	0.1A	0.1A	±1%	±1%	±1%	±1%

**Total Output Power:** Max. 80W with 7 CFM force air cooling<sup>(Note 4)</sup>; 60W convection cooled at 50°C environment temperature .

- 1) Measured by a 20MHz bandwidth limited oscilloscope and the each output is connected with a 10µF Electrolytic Capacitor and a 0.1µF Ceramic Capacitor.
- 2) Initial Setting Accuracy is at Input 110VAC and all output at 60% rated load.
- 3) With optional +5Vsb combining remote on/off function.
- 4) Air flow from IC3 to the body of PSU with distance 50mm maximum.

### Input Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Input Voltage	Continuous input range.	90	115/230	264	VAC
Input Frequency	AC input.	47		63	Hz
Hold Up Time	Nominal AC Input Voltage (115VAC/230VAC), rated load.	16			ms
Input Current	Nominal AC Input Voltage (115VAC/230VAC), rated load.			1.5	A
Inrush Current	Nominal AC Input Voltage (115VAC/230VAC), one cycle at 25°C.			60	A
Input Protect	Non-user serviceable internally located AC input line fuse.				
No-load power consumption	Nominal AC Input Voltage (115VAC/230VAC).			<0.5	W

### Output Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Efficiency	At 230VAC Input , rated load, warm up with 0.5 hr.	86	87		%
Minimum load					See Chart of Description
Ripple & Noise	Rated load, 20MHz bandwidth				See Chart of Description
Output Power	Continuous output power.				See Chart of Description
Line Regulation	Less than ±1% at rated load with ±10% changing in input voltage 115VAC.				See Chart of Description
Load Regulation	Measured from 60% to 100% rated load and from 60% to 20% rated load (60% ±40% rated load).				See Chart of Description
Turn-on Delay	Time required for initial output voltage stabilization.		0.3		Sec

Specification subject to change without prior notice.

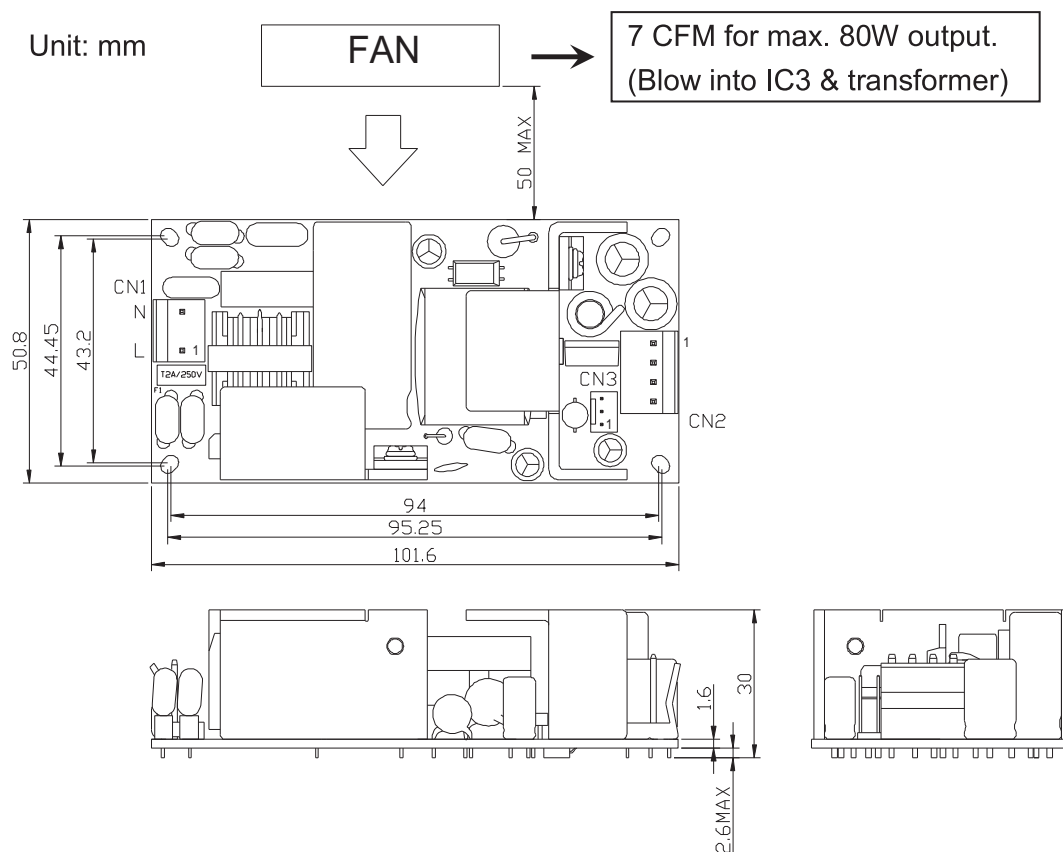
- 1) As a build in type power supply, the power supply needs to be installed in a suitable enclosure to pass the EMI/EMC tests. The final assembly has to comply with the valid EMI/EMC and safety.
- 2) The mounting holes should be connected to each other to conform the EMI limit.
- 3) The test result of input 240Vac / 100Vac is criteria A / B.

## Mechanical Specification

Parameter	Conditions/Description			
Dimension	101.6 (L) x 50.8 (W) x 30 (H) mm, Tolerance +/- 0.4mm.			
Connector	CN1 --- AC input:	Molex 09-65-2038 or equivalent (remove the middle pin).		
	CN2 --- DC output:	Molex 09-65-2048 or equivalent.		
	CN3* --- 5Vsb:	Molex 22-04-1031 or equivalent.		
Pin Assignment	CN1	Pin	1. L	2. N
	CN2	Pin	1. V+	2. V+      3. V-      4. V-
	CN3*	Pin	1. +5Vsb	2. GND      3. Remote On / Off

\*= Only for 5Vsb model (see point 8).

## Mechanical drawing



### \*Application note:

The installation shall be kept in an isolation distance min. 2.8mm between the unit and the system chassis. There exist hazardous voltage in dotted area, keep insulating to avoid hazardous electric shock.

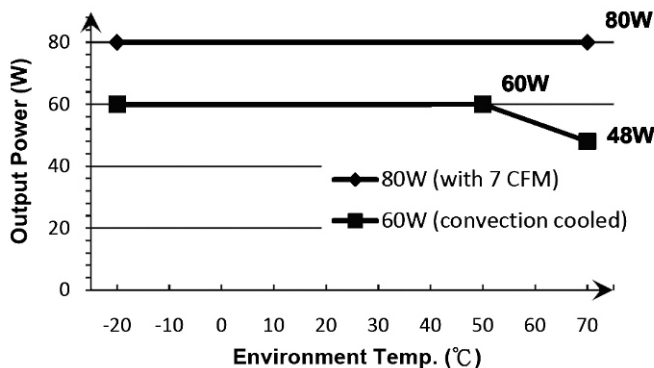
## Interface Signals and Internal Protection

Parameter	Conditions/Description
Short Circuit Protection	Fully protected against output overload and short circuit. Automatic recovery upon of overload condition.
Over Voltage Protection	For some reason the power supply fails to control itself, the build-in over voltage protection circuit will auto recovery the outputs to prevent damaging external circuits.
Remote on/off (optional)	The power supply will be turned on when the power On/Off pin is connected to secondary GND. This function exists only with optional +5Vsb (see section 8).

## Environment Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Operating Temperature	Derate linearly above 50°C by 1% per °C to a maximum temperature of 70°C, with convection cooled.	-20		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing.	5		95	%RH
Altitude	Operating			3K	Meter
	Non-operating			4K	

## Performance curve



\* Test within horizontal installation, for other orientation, please confirm with us.

## Safety Approvals, EMI and EMS Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units	
Approvals	IEC, IEC 60950-1: 2005+A11: 2009, 2 <sup>nd</sup> Edition				CE approved	
	TUV, EN 60950-1: 2006+A11, 2 <sup>nd</sup> Edition					
	UL, UL 60950-1, 2nd Edition, 2007-03-27					UL approved
	CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03					cUL approved
Hi-Pot	Input to output	3000			VAC	
EMI (Note 1, 2.)	EN 55022 / CISPR 22 & FCC Part 15	B			Class	
	EN 61204-3	B				
EMS	IEC 61000-4-2	±8KV air discharge, ±6KV contact discharge	A		Criteria	
	IEC 61000-4-3	10V/m	A			
	IEC 61000-4-4	±2KV Line & PE	A			
	IEC 61000-4-5	L-N:±1KV, L/N-PE:±2KV	A			
	IEC 61000-4-6	10Vrms	A			
	IEC 61000-4-8	10A/m	A			
	IEC 61000-4-11	Voltage dips >95%, 0.5 cycle	A			
		Voltage dips 30%, 25 cycles	A			
Voltage dips 60%, 5 cycles		A / B (Note 3.)				
	Voltage interruptions >95%, 250 cycles	B				