



SPECIFICATION

For

SWITCHING POWER SUPPLY

M/N: MPI-S101 Series



Revision History

Rev. No.	Rev. Description	Rev. Date

**FEATURES**

- 100W single output within 2 x 4" compact size
- Active PFC Meets EN61000-3-2 & EN6100-3-3 Class D
- Conducted EMI meets CISPR/FCC Class B
- High Efficiency to 85%

1. Description

MPI-S101 series are a 100W single output, open frame switching power supply with PFC function for industrial application. The active PFC design meets EN61000302 and EN61000-3-3 regulation and the high efficiency upto 85%.

Model	Output Voltage	Min. Load	Rated Load	Line ^(Note 1) Regulation	Load ^(Note 2) Regulation	Voltage ^(Note 3) Setting	Ripple & Noise ^(Note 4) p-p	Efficiency
MPI-S101-12	+12V	0A	8.4A	±0.5%	±1%	±1%	1%	85%
MPI-S101-15	+15V	0A	6.7A	±0.5%	±1%	±1%	1%	85%
MPI-S101-24	+24V	0A	4.2A	±0.5%	±1%	±1%	1%	85%
MPI-S101-48	+48V	0A	2.1A	±0.5%	±1%	±1%	1%	85%

Note: 1) Line regulation is measured from 100Vac to 240Vac with full load.

2) Load regulation is measured from 10% to 100% load.

3) Voltage setting is at 60% rated load and 25°C.

4) Add a 0.1uF ceramic capacitor and a 10uF E.L.capacitor to output for Ripple & Noise measuring@20MHz BW.

2. Input Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Input Voltage-AC	Continuous input range.	90	115/230	264	VAC
Input Frequency	AC input.	47	50/60	63	Hz
Hold Up Time			18		ms
Inrush Current	At 240VAC			80	A
Leakage Current				3.5m	A

3. Output Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Minimum load		See Chart of Description			
Ripple & Noise	Rated load, 20MHz bandwidth	See Chart of Description			
Output Power			100		Watt

4. Interface Signals and Internal Protection

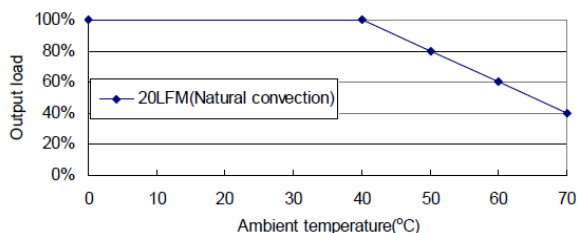
Parameter	Conditions/Description
Over Voltage Protection	Auto recovery
Short Circuit Protection	Automatic recovery upon of short circuit condition.



5. Environment Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Operating Temperature	At Rated load 40~70°C with 2.5%/°C Derating (See chart below)	-10		70	°C
Storage Temperature		-20		+85	°C

Derating curve



6. Safety Approvals, EMI and EMS Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Safety Approvals	UL, UL 60950-1, 1 st edition				approved
Hi-Pot	Input to output	4242			VDC
Radiation	EN 55022 / CISPR 22 & FCC Part 15	B			
Conduction	EN 55022 / CISPR 22 & FCC Part 15	B			Class
PFC	EN 61000-3-2 & EN 61000-3-3	D			
EMS	IEC 61000-4-2, 8KV air discharge and 6KV contact discharge	3			
	IEC 61000-4-3, 3V/M	2			
	IEC 61000-4-4, 2KV line & PE	3			
	IEC 61000-4-5, 2KV	3			Level
	IEC 61000-4-6, 10V	3			
	IEC 61000-4-8, 10A/M	3			
	IEC 61000-4-11	3			

7. Mechanical

Parameter	Conditions/Description
Dimension	101.6 x 50.8 x 27.94 mm, Tolerance +/- 0.5mm.
Connector	CN1 --- AC input: Molex 5277 or equivalent. CN2 --- DC output: Molex 5273 or equivalent.
Pin Assignment	DC output pin 1, 2 : Vout (+) DC output pin 3, 4 : Vout (-)

