

# MPE-S100(-SB)-B(-C)

100W AC / DC



## FEATURES

- ✓ 115W fan cooling, 100W with convection-cooled of single output power supply.
- ✓ Compact size 2 x 4 inch and low profile.
- ✓ High efficiency up to 90%.
- ✓ No-load power consumption < 0.5W.
- ✓ Optional +5Vsb and remote on/off function.
- ✓ Class II, also class I with optional functional ground connected.
- ✓ ITE safety standard IEC 62368-1, UL 62368-1 approved.
- ✓ Meets EMI CISPR/FCC class B.
- ✓ PFC meet EN 61000-3-2 Class A and EN 61000-3-3.



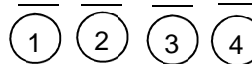
## Models & Ratings

Model Number	Wattage (Rated / Max)	Output Voltage		Min. Current	Rated Current	Max. Current	Typical Efficiency
		V1	V2(With 5VSB)				
MPE-S103-B / -SB	100 W / 115 W	+12 V	+5 V	0 A	8.34 A	9.59 A	90%
MPE-S105-B / -SB	100 W / 115 W	+24 V	+5 V	0 A	4.17 A	4.8 A	90%
MPE-S106-B / -SB	100 W / 115 W	+48 V	+5 V	0 A	2.09 A	2.4 A	90%
Dimensions	101.6 (L) x 50.8 (W) x 34.2 (H) mm, Tolerance +/- 0.4mm.						

Total Output Power: Max. 100W convection cooled, max. 115W with 7 CFM at 50°C; max. 100W with 7 CFM at 70°C environment temperature.

Note: MAX output current can be sustained if the total power doesn't exceed 100W.

## Model no. coding : M P E – S 10 0 – X – B – Y – Z



1	X=	Output set	2	B=	62368-1 Approved	3	Y=	Connector Type	4	Z=	Mechanical
	blank	Single output		blank	Molex Type Connector or equivalent		blank	Open frame			
	SB	Dual output (with +5Vsb & remote on/off function)		J	JST Type Connector or equivalent		C	Optional cover kit			

## Input

<b>Input Voltage</b>	● 85 ~ 264VAC
<b>Input Frequency</b>	● 47 ~ 63 Hz
<b>Input Current</b>	● 2.5A
<b>Inrush Current</b>	● 30 / 60A
<b>No-load power consumption</b>	● <0.5W
<b>Input Protection</b>	● Fuse: 3.15A /250VAC * 1pc

## Output

<b>Output Voltage</b>	● 12V, 24V, 48V
<b>Minimum Load</b>	● 0A
<b>Hold up Time</b>	● 10 / 40 mS
<b>Line Regulation</b>	● ±1.0 <sup>(V1)</sup> , ±1.0 <sup>(V2)</sup> %
<b>Load Regulation</b>	● ±1.0 <sup>(V1)</sup> , ±1.0 <sup>(V2)</sup> %
<b>Ripple &amp; Noise</b>	● 120 <sup>(+12V)</sup> , 240 <sup>(+24V)</sup> , 480 <sup>(+48V)</sup> , 50 <sup>(5VSB)</sup>
<b>Overvoltage Protection</b>	● Around 110%~135% of O/P voltage, the built-in voltage protection circuit will auto recovery.
<b>Short Circuit Protection</b>	● Automatic recovery upon of overload condition
<b>Remote On/Off</b> (Only with 5Vsb)	● Turned on when the power On/Off pin is connected to secondary GND.

## General

<b>Isolation</b>	● IP to OP 3000 VAC IP to GND 1500 VAC
<b>Switching Frequency</b>	● 65 KHZ

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## EMC: Immunity

ESD	● IEC 61000-4-2
Radiated	● IEC 61000-4-3
EFT	● IEC 61000-4-4
Surges	● IEC 61000-4-5
Conducted	● IEC 61000-4-6
Power Magnetic	● IEC 61000-4-8
Dips and Interruptions	● IEC 61000-4-11

## Environmental

Operating Temperature	● -20 ~ +70°C
Storage Temperature	● -40 ~ +85°C
Relative Humidity	● 5 ~ 95%RH
Cooling	● 7 CFM
Operating / Non-operating Altitude	● 3000 / 4000

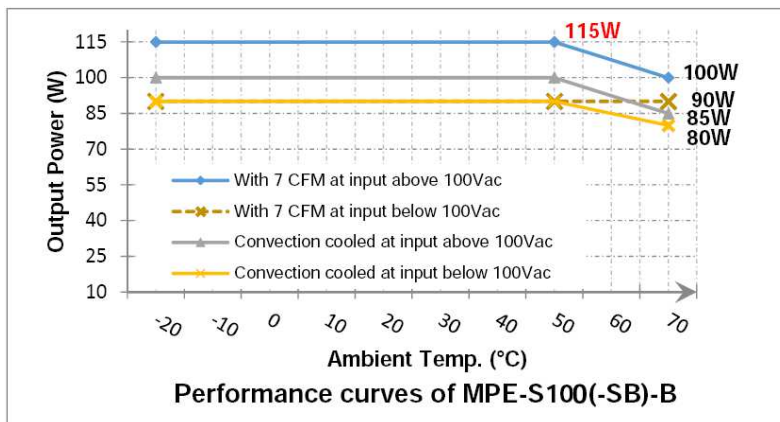
## EMC: Emissions

Conducted	● EN 55022 / EN 55032 / CISPR 32 & FCC Part 15
Radiated	● EN 55022 / EN 55032 / CISPR 32 & FCC Part 15
Harmonic Current	● EN 61000-3-2
Voltage Fluctuations	● EN 61000-3-3
Voltage Flicker	● EN 61204-3

## Safety Approvals

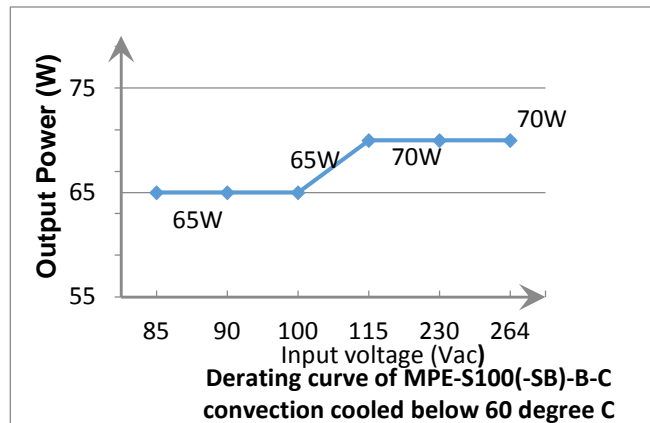
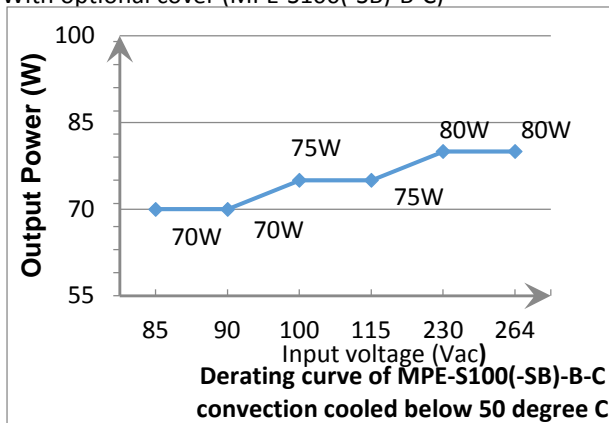
TUV	● EN 62368-1, 2 <sup>nd</sup> Edition EN 60950-1, 2 <sup>nd</sup> Edition
CB	● IEC 62368-1, 2 <sup>nd</sup> Edition IEC 60950-1, 2 <sup>nd</sup> Edition
UL/cUL	● UL 62368-1, 2 <sup>nd</sup> Edition, CSA C22.2 No. 62368-1-14, 2 <sup>nd</sup> Edition UL 60950-1, 2 <sup>nd</sup> Edition, CSA C22.2 No. 60950-1-07, 2 <sup>nd</sup> Edition

## Derating Curve



Note: Air flow from IC3 to the body of PSU with distance 50mm maximum.

With optional cover (MPE-S100(-SB)-B-C)



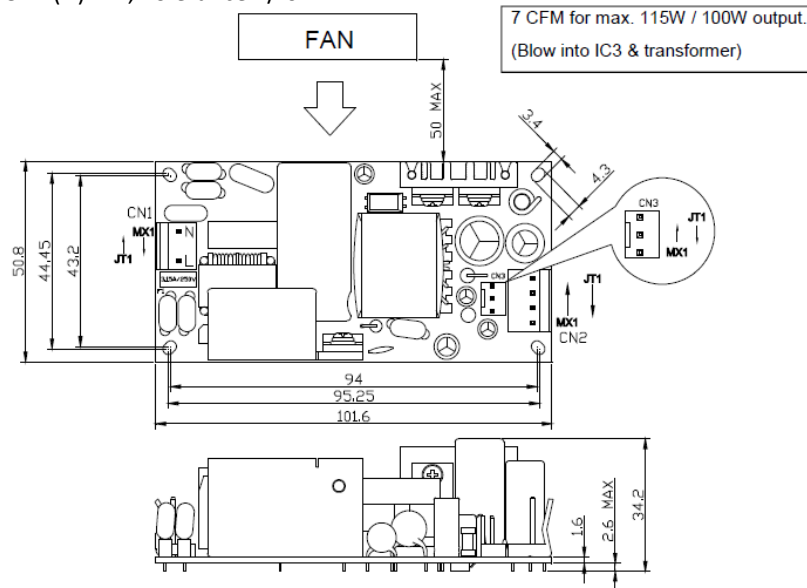
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## Mechanical

M/N: MPE-S100-SB-B

SIZE : 101.6(L) x 50.8(W) x 34.2(H)mm, Tolerance +/-0.4mm.



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.

For m/n: MPE-S100(-SB)-B-C Unit: mm Tolerance: +/- 0.4mm

