



# Installation Manual

## ● **Type : Open Frame (PCB) Type Switching Power Supply**

(Families: PM, NFM, IRM, MPS, MPD, MPT, MPQ, RPS, RPD, RPT, PS, PD, PT, PQ, PPS, PPT, PPQ, ASP, PID, LPS, LPP, EPS, ELP, EPP)

## ● **Introduction**

An open frame (PCB) type switching power supply is a power supply designed to be integrated or installed into a system enclosure. Mean Well's open frame (PCB) type power supplies include on board, general PCB, green PCB, and medical PCB types.

## ● **Installation**

- (1) Before commencing any installation or maintenance work, please disconnect your system from the utility. Ensure that it cannot be re-connected inadvertently!
- (2) At least 5mm insulation distance on the bottom of the unit should be kept and a Mylar film should be added between the unit and the system. In addition, keep enough insulation distance, 10mm for general type/15mm for medical type, around the unit.
- (3) Power supplies greater than 120W may require a forced air/fan for cooling. Please refer to specifications to receive a minimum air intensity and air-flow direction.
- (4) Allow good ventilation for the unit in use to prevent it from overheating. Also, a 10-15 cm clearance must be kept when the adjacent device is a heat source.
- (5) Mounting orientations other than standard orientation or operate under high ambient temperature may increase the internal component temperature and will require a de-rating in output current. Please refer to the specification sheets to receive the optimum mounting position and information about the de-rating curve.
- (6) Recommended wires are shown as below.

AWG	18	16	14	12	10	8
Rated Current of Equipment (Amp)	6A	6-10A	10-16A	16-25A	25-32A	32-40A
Cross-section of Lead(mm <sup>2</sup> )	0.75	1.00	1.5	2.5	4	6
Note: Current each wire carries should be de-rated to 80% of the current suggested above when using 5 or more wires connected to the unit.						

- (7) For other information about the products, please refer to [www.meanwell.com](http://www.meanwell.com) for details.

## ● **Warning / Caution !!**

- (1) Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not try to fix the power supply by yourself!
- (2) Please do not install power supplies in places with high moisture or near the water.
- (3) Please do not install power supplies in places with high ambient temperature or near fire source. Please refer to the specifications about the maximum ambient temperature limitations.
- (4) Output current and output wattage must not exceed the rated values on specifications.
- (5) The ground (FG) must be connected to earth ground.
- (6) All MW's PSUs are designed in accordance with EMC regulations and the related test reports are available by request. Since they are belong to component power supplies and will be installed inside system enclosure, when they are integrated into a system, the EMC characteristics of the end system must be re-verified again.



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### Manufacturer :

MEAN WELL ENTERPRISES Co., LTD.  
No.28, Wuquan 3rd Rd., Wugu Dist.,  
New Taipei City 24891, Taiwan  
Tel: +886-2-2299-6100  
Web: [www.meanwell.com](http://www.meanwell.com)

### Branch Office :

#### ***China***

MEAN WELL (GUANGZHOU)  
ENTERPRISES Co., LTD.  
2F, A Building, Yuean Industry Park,  
Huangcun, Dongpu Yown, Tianhe  
District, Gungzhou, China  
Post Code: 510660  
Tel: +86-20-2887-1200  
Web: [www.meanwell.com.cn](http://www.meanwell.com.cn)

#### ***U.S.A.***

MEAN WELL USA, INC.  
44030 Fremont Blvd., Fremont,  
CA 94538, U.S.A.  
Tel: +1-510-683-8886  
Web: [www.meanwellusa.com](http://www.meanwellusa.com)

#### ***Europe***

MEAN WELL EUROPE B.V.  
Langs de Werf 8, 1185XT  
Amstelveen, The Netherlands  
Tel: +31-20-758-6000  
Web: [www.meanwell.eu](http://www.meanwell.eu)