

SUSTAINABLE
DEVELOPMENT
GROUP



PCB Type PSU Product Line Introduction

Product Strategy Center info@meanwell.com

MEAN WELL



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▼ Product Category and Road Map

▼ Key Features

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MEAN WELL

Introduction

Why choose PCB type power supply?

No Enclosure Cost

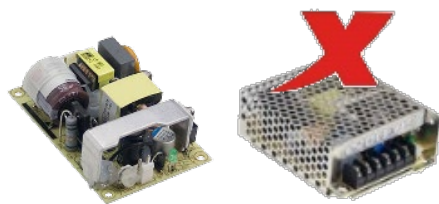
Mounted inside end system, so no need to have enclosure



Camera Battery Charger

Save Space

Power supply takes up less space since there is no enclosure



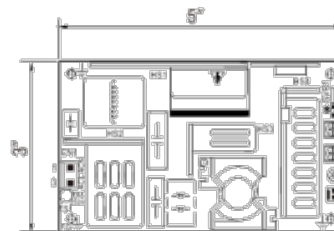
Standard Mounting

Standardized footprint and mounting hole locations.

5" x 3"

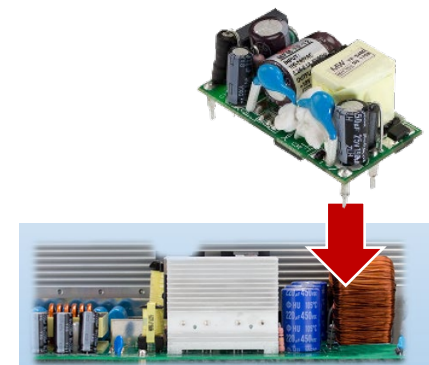
4" x 2"

3" x 2"



Direct Soldering








Direct solder on PCB (on-board Type), no need for wiring



Product Category

※ Blue words are under development

※ Please click on series names for related introduction webpages or specifications.

| PCB Type | | On Board Type | |
|---|---|--|--|
|  3" × 2" | Industrial Grade 25W~120W <u>EPS Series</u> , <u>EPP Series</u> |  Non-potted / Medical Grade 5W~30W <u>MFM Series</u> | |
| | Medical Grade 30W~120W <u>RPS Series</u> | | |
|  4" × 2" | Industrial Grade 45W~200W <u>EPS Series</u> , <u>EPP Series</u> 200W~300W <u>LOP Series</u> |  Potted / Medical Grade 5W~90W <u>MPM Series</u> | |
| | Medical Grade 60W~200W <u>RPS/ RPD/ RPT Series</u> | | |
|  5" × 3" | Industrial Grade 45W~500W <u>PD/ PT/ PPT/ RPD</u> , <u>EPP Series</u> 400W~600W <u>LOP Series</u> |  Potted / Industrial Grade 1W~90W <u>IRM Series</u> | |
| | Medical Grade 75W~500W <u>RPS/D/T Series</u> | | |
|  Others | <u>PD-25 Series</u> , <u>PID-250 Series</u> <u>MPQ-200 Series</u> <u>LPS-50/75/100 Series</u> <u>ELP-75 Series</u> , <u>LPP-100/150 Series</u> | | |

Road Map

PCB Type

※ Blue words are under development

3" x 2"



EPS-25/ 35 Series
EPS-45S/ 65S Series
RPS-30/ 45/ 65 Series



EPP-120S Series
RPS-120S Series

4" x 2"



EPS-45/ 65 Series
RPS/ D/ T-60 Series



EPP-100 Series
EPS-120 Series
RPS-120 Series



LOP-200 Series
EPP-150 Series
EPP-200 Series
RPS-200 Series



LOP-300 Series

5" x 3"



PD/T-45/ 65 Series
RPS/ D/ T-75 Series



PPT-125 Series
RPS/ D/ T-160 Series



EPP-300 Series
RPS-300 Series



LOP-400 Series
EPP-400 Series
RPS-400 Series



LOP-500 Series
EPP-500 Series
RPS-500 Series



LOP-600 Series

50W

100W

200W

300W

400W

500W

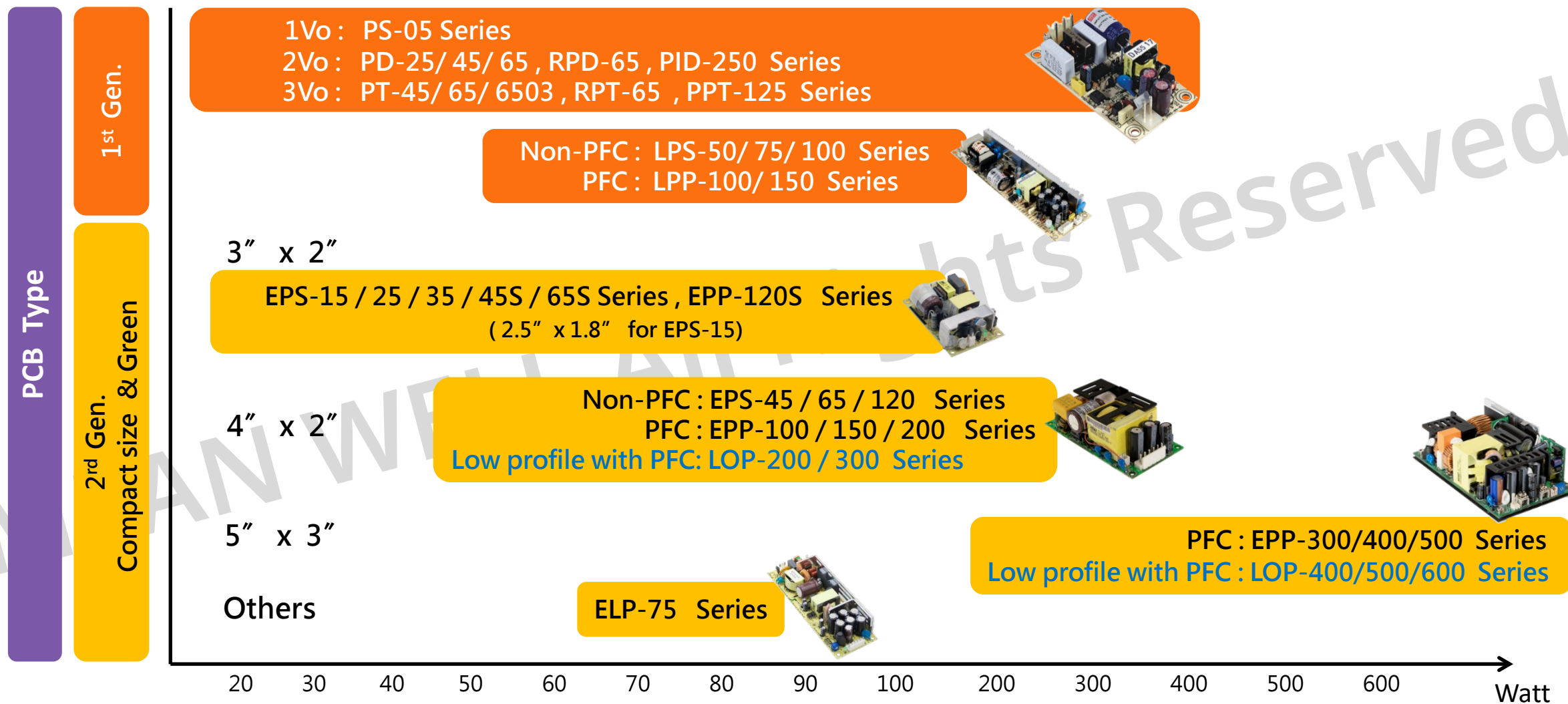
600W

→ Watt

Road Map

Industrial Grade

※ Blue words are under development



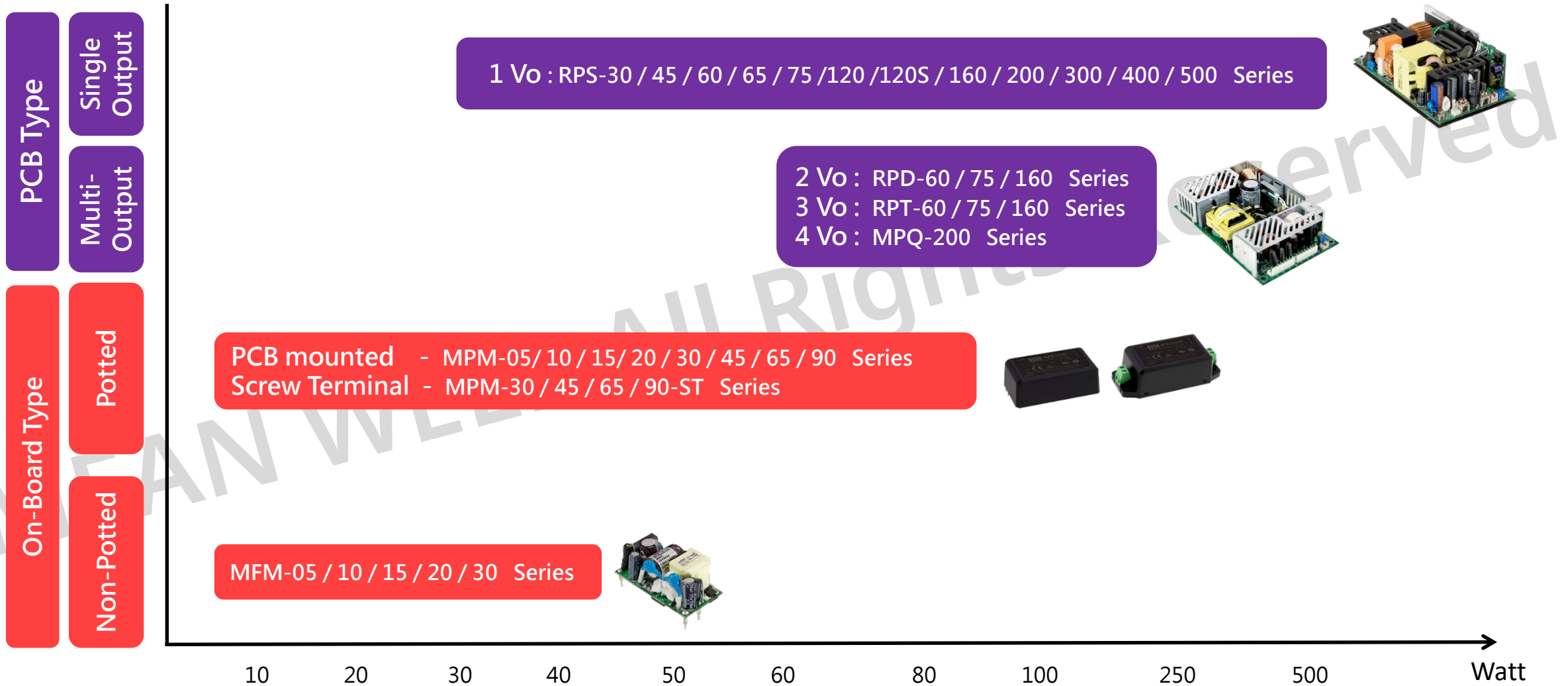
Road Map

Industrial Grade



Road Map



Medical Grade



Key Features

Low No-load Power Consumption

MEAN WELL PCB type power supply have low no-load power consumption, which allows end system to meet energy efficiency regulations more easily!

| Type \ No-load power | < 0.075W | < 0.1W | < 0.3W | < 0.5W |
|---|--|--|---------------------|--|
| On-board non-potted  | MFM-05 ~ 30 Series | | | |
| On-board potted  | IRM-01 ~ 03 Series MPM-05 ~ 30 Series | IRM-05 ~ 60 Series MPM-45~90 Series | IRM-90 Series | |
| PCB Industrial  | | EPS-45S/ 65S Series | EPS-15 ~ 120 Series | EPP-100 ~ 500 Series LOP-200~600 Series |
| PCB Medical  | | RPS-30 ~ 65 Series | RPS-120/120S Series | RPS-200 ~ 500 Series |

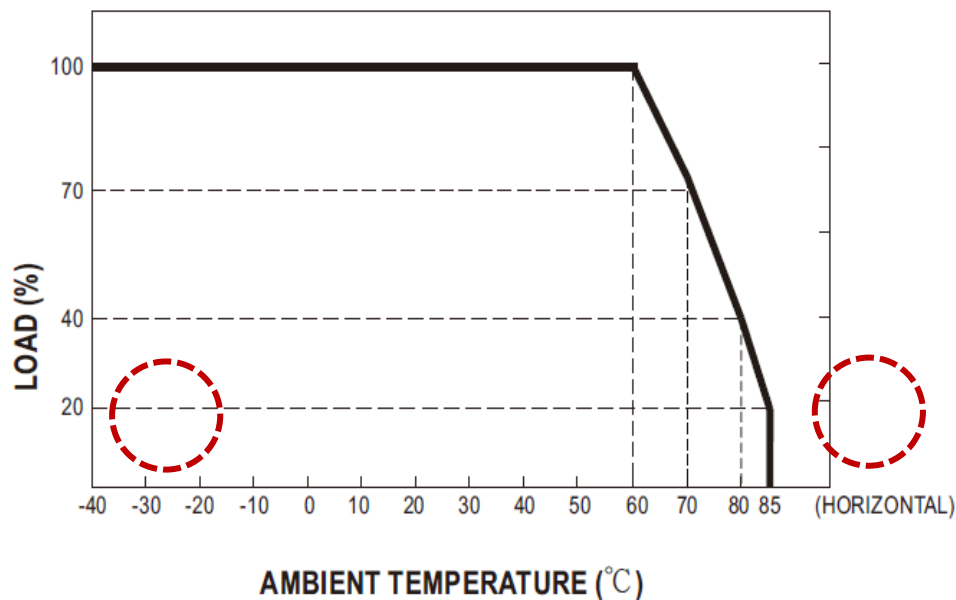
Key Features

Wide Operating Temperature Range

Accepted by more countries and have less restricted use environment

MEAN WELL PCB Power Supply (MPM-05 as example)

WORKING TEMP. -40 ~ +85°C (Refer to "Derating Curve")



Market Solution

Environmental

| Characteristic | Minimum | Typical | Maximum | Units |
|-----------------------|---------|---------|---------|-------|
| Operating Temperature | -25 | | +70 | °C |

Notes & Conditions

Derate linearly from 100% at +50 °C to 50% at +70 °C

General Specifications

| | | |
|--------------------|------------------|---------------------|
| Temperature ranges | - Operating | -30°C to +70°C |
| | - Power derating | 2.0 %/K above +60°C |

Key Features

Complete Safety


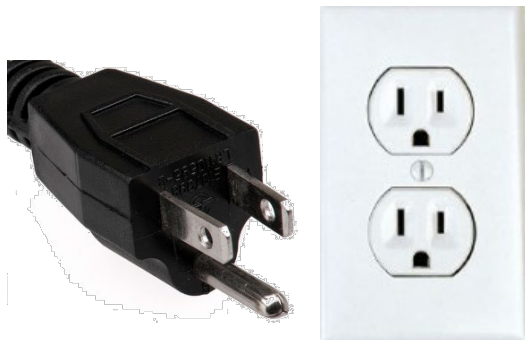

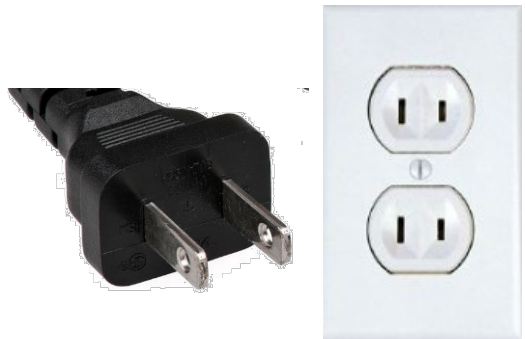
No Safety Cost · Ready to Use

| Series | Safety | Application |
|--|--|---|
| EPS-15~120 Series EPP-100~500 Series LOP-200~600 Series PSC-35~160 Series PD/PT/PPT/RPD Series | ITE Certifications IEC,EN,UL 62368-1/ EN60335-1  |  |
| RPS-30~500 Series MPM-5~90 Series MFM-5~30 Series RPD/RPQ/MPQ Series | Medical Certifications IEC, EN, ANSI/AAMI 60601-1  |  |
| IRM-01~90 Series | Pass LPS certification , 90~305Vac input, suitable for worldwide use!  |  |

Key Features

Class I & Class II

MEAN WELL Class I and Class II power supply products are tested to EMI requirements, which help speed up end system EMI debugging time.

| Product Category | | Application | Note |
|---|--|---|--|
|  Class I |  | AC input with protected earth ground | <p>1. Class I : Grounding requirements for specific locations, i.e. hospital</p> <p>2. Class II :</p> <ul style="list-style-type: none">a. Low leakage, can solve issues caused by multiple units connected in parallelb. No need to worry about interference issues caused by grounding connection |
|  Class II |  | Two-line input without protected earth ground | |

Advantages

Complete Product

Installation

- PCB Type
- On-board Type
- SMD Type

Standard size

- 5" x 3"
- 4" x 2"
- 3" x 2"

Complete Safety

ITE / Industrial

- IEC62368-1
- EN62368-1
- UL62368-1
- EN61558-1

Medical

- IEC60601-1
- EN60601-1
- ANS/AAMI60601-1

Home Appliances EN60335-1

High Reliability

- - 40~+85°C operating temperature
- +50°C full load output
- Strict component selection, long lifetime, 3 years warranty

Sales Channel

- Global channel sales
- Quick and localized sales services
- Standard products available from stock

Applications



Internet of Things

- Solar power monitoring
- Smart meters
- Intelligent lighting control
- Sensors



Automation

- Automatic irrigation
- Electrostatic sprayer
- 3D printer



Household


- Water machine
- Coffee machine
- Smart faucet
- Smoke detector




Medical

- Medical cart
- Biomedical analyzer
- Respirator
- Portable instrument


WHY MEAN WELL

P **Products** 
More than 10,000 models, continues to introduce 10% new models and EOL 5% every year

Q **Quality** 
High reliability and quality indicator
Post-sales failure rate decreases by 10% each year

C **Cost** 
High cost-performance products, stable material price, complete supply chain integration

D **Delivery** 
24-hour delivery for small amount order.
14-day delivery for frequent purchase standard products.

S **Service** 
MEAN WELL Group and distributors provide services 24 hours a day, and commit to reply within 24 hours

R **Reliable Relationship** 
75% of revenue come from long-term distributors and customers

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