



## Configurable Power Solution

# 650/1200W Configurable Modular Power- NMP Series

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## System Power New Product Introduction - NMP Series

# Key Selling Points of NMP Series

- Modular product design, configurable as per customer requirements.
- Plug in NMS-240 / **NMD-240** (Dual Output Voltage) DC module cards to configure a multiple output power supply.
- **1U slim mechanical design**, fit space constraint instruments or systems.
- Front-end and DC/DC module cards are separately certified by safety agencies. Can be **sold separately** as components or as **assembly of a power supply unit**.



NMS-240



NMD-240

# Key Selling Points of NMP Series

- Certified by **60601-1** and **62368-2** dual safety standards, comply with **2x MOPP** medical insulation regulation
- PV (Programmable Voltage) & PC (Programmable Current) functions (NMS-240 only)
- Comply with **SEMI F47** standards for **semiconductor manufacturing equipment**.
- Intelligent control functions



NMS-240



NMD-240

## NMD-240 Features

- Dual isolated output channels;
- **Independent protection** on both output channels;
- Output voltage is adjustable via separate SVRs;
- Two sets of remote control signals;
- Dual safety certifications:  
Medical 60601-1 & Industrial 62368-1;
- 2x **MOPP** medical grade insulation design;
- **Bi-color** output connector to indicate **polarity** of output voltage;
- Comply with **SEMI F47** standards for **semiconductor manufacturing equipment**.
- 5-year warranty



Model No.	NMD-240	
Output Channel	V1	V2
Vo Adj. Range	3-30V	3-30V
Iout Max.	5A	5A
Pout Max.	150W	150W
Combined Power	240W	

# Modular Power Supply Design

Fast customization on **PSU Configurations/ Electrical Parameters**

Add more D/D modules: multiply output power;

D/D modules in Parallel / Series operation: multiply output Current / Voltage;


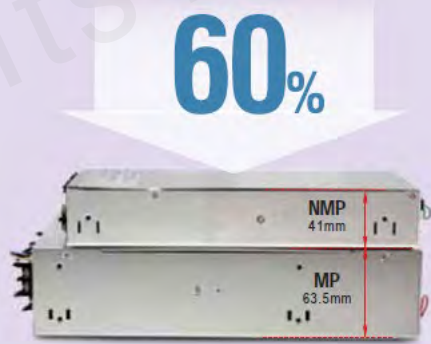
PV / PC function: adjust output Voltage / Constant Current Limit

Create a multiple output PSU by just plugging in **NMS-240** & **NMD-240** (Dual Output Voltage) D/D module cards, maximum **12** channels!



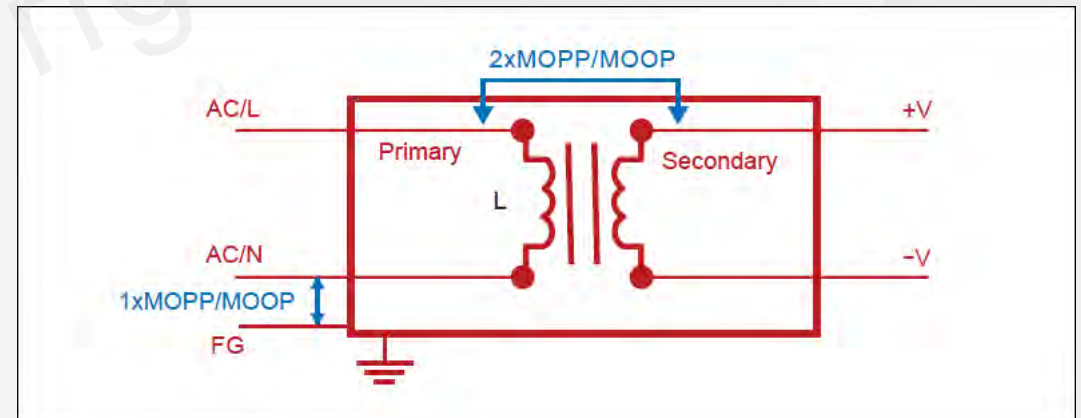


# 1U Slim Mechanical Design

Concerns	Solutions
	
<ul style="list-style-type: none"><li>• Limited by old technology on components, modular PSU used to be much bigger in size. If end system has insufficient inner space, modular PSU can't be applied. °</li><li>• Nowadays, industrial and medical instruments become <b>compact and lighter</b>, thus demands for slim solution is increasing.</li></ul>	<ul style="list-style-type: none"><li>• <b>Enlarge Power Density</b> of Front-end and D-D module cards</li><li>• Use <b>coolers with higher airflow</b> to boost heat dissipation for PSU</li></ul>

# Medical & Industrial Dual Safety

- **62368 -1 Industrial & 60601-1 Medical Dual Safety Certification**  
Widest range for product applications
- **2x MOPP Medical Grade Insulation Design**  
(MOPP, Means of Patient Protection)
- **Low Touch Current**  
<100uA @264Vac



Effectively protect patients from the risk of fatal electric shock!

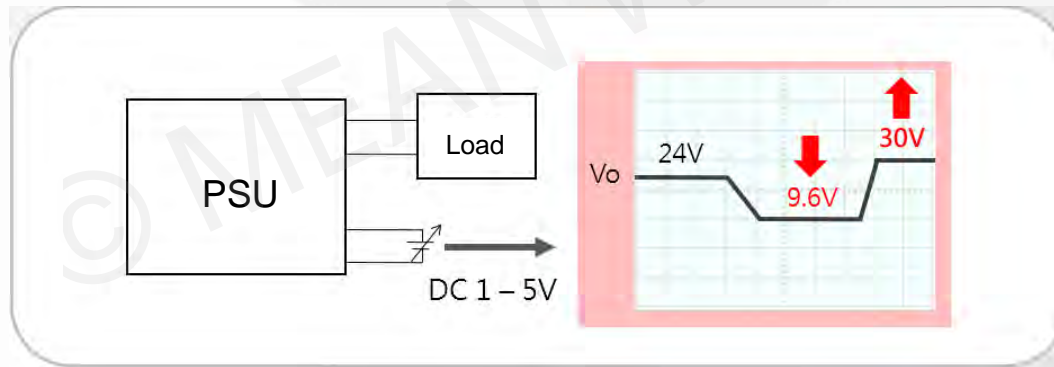
# Programmable Outputs (PV & PC)

Output **Voltage** and Output **current limit** can be adjusted!

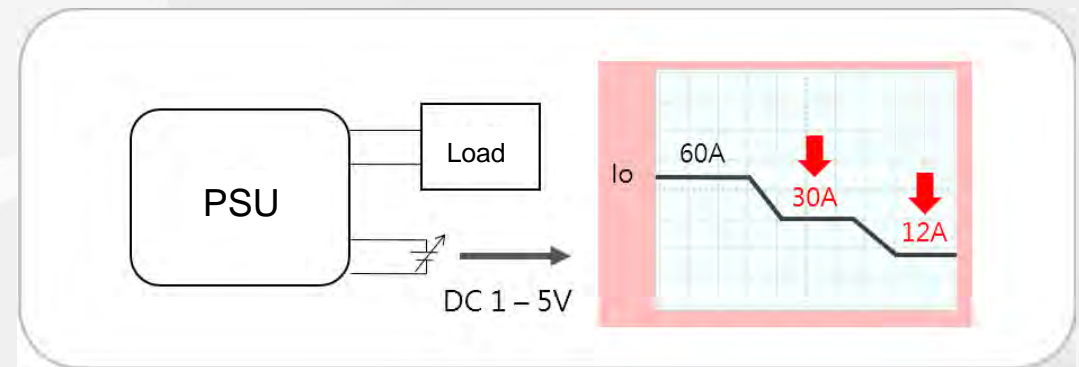
Use external DC signal to control output voltage/current limit.

Fully base on user's need to tune up or down within specification defined.

## Programmable Voltage, PV Function



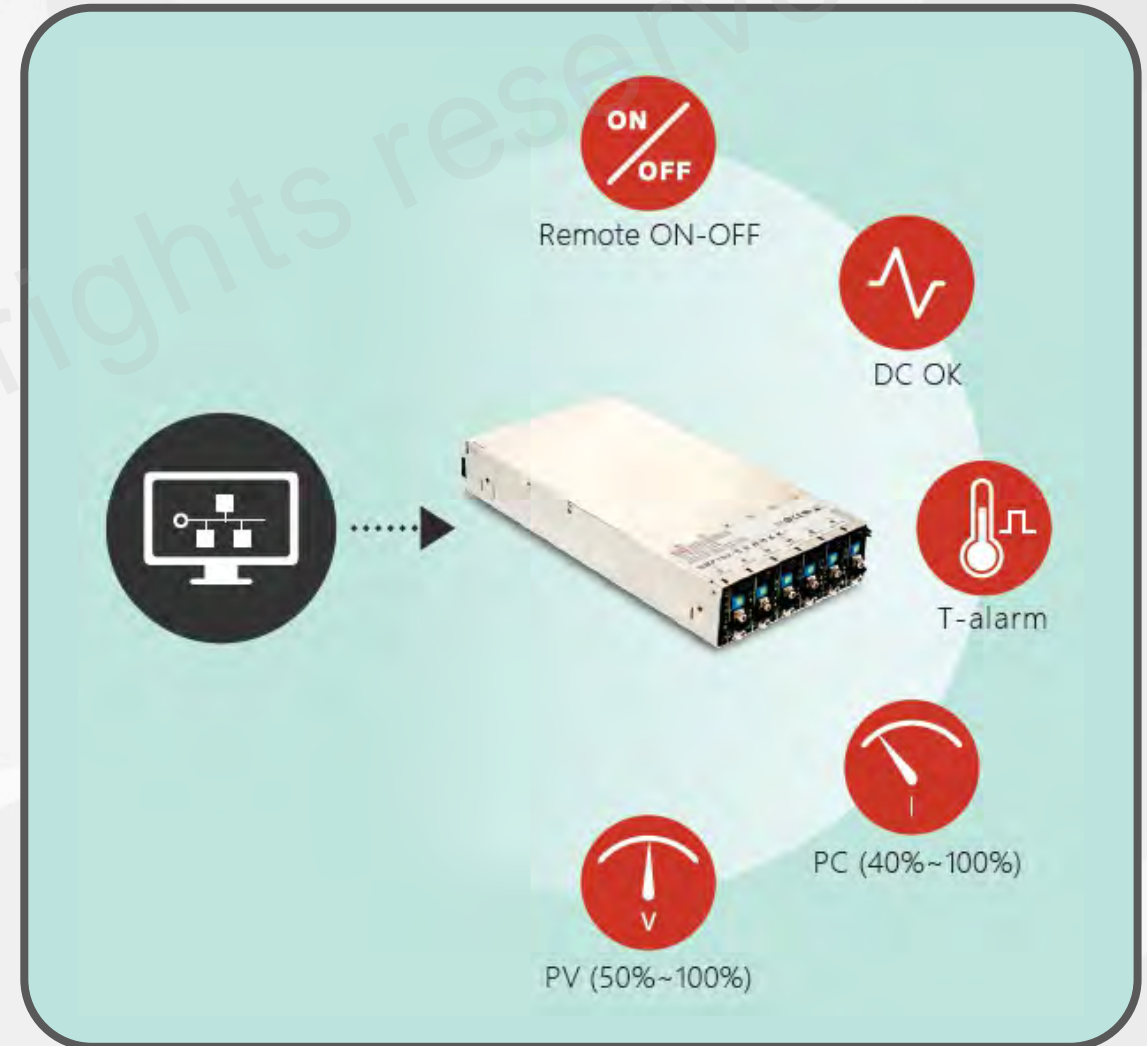
## Programmable Current, PC Function





# Intelligent Control Functions

- **Intelligent and Automatic Monitor/Control**  
Featured **Remote ON/OFF**, **DC OK**, **T-alarm** signal, and programmable output (**PV & PC**) functions to easier monitor and control PSU.
- **Remote ON/OFF Signal**  
Turn **ON/OFF** DC modules all at once or one by one.
- **T-alarm signal**  
Send **over-temperature alert** thru TTL signal to avoid system crash due to **OTP** condition.



## Applications of NMP Series

### Industrial Automation



#### 3D Printer

- Space constraint
- Drive Motor & Control signals



#### Energy Storage System

- Need multiple output voltages to drive BMS sub-system
- Space constraint in BMS sub-system

### Medical Equipment



#### Medical Instruments

- Space constraint
- Need to comply with 60601-1 & 2x MOPP standards



#### MRI Scanner

- Space constraint
- Drive Motor & Diagnostic Computer

# 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