Installation Manual

- **Type：** **Medical Switching Power Supply**
  - **(1) Enclosed (Families: MSP)**
  - **(2) Modular (Families: MP, NMP)**
  - **(3) PCB (Families: MPS, MPD, MPT, MQ, RPS, RPD, RPT, RPTG, NEM, PM)**
  - **(4) Adaptor (Families: GSM, MES)**

- **Installation**

(1) Enclosed Type

(a) Before any installation or maintenance work, please disconnect your system from the utility. Ensure that it cannot be re-connected inadvertently!

(b) 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.

(c) Fans or ventilation holes must be kept free from any obstructions. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.

(d) Keep enough insulation distance between mounting screws and internal components of Enclosed units. Please refer to case drawing on specifications to receive the maximum length of mounting screw.

(e) Recommended wires of Enclosed units 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^2)	0.75	1.00	1.5	2.5	4	6
Note: The suggested maximum current above only suit for 1-4 strips, 5 or more strips should not exceed 80% of current rating.						

Make sure that all strands of each stranded wire enter the terminal connection and the screw terminals are securely fixed to prevent poor contact.

(f) For other information about the products, please refer to www.meanwell.com for details.

(2) Modular Type

(a) Before any installation or maintenance work, please disconnect your system from the utility. Ensure that it cannot be re-connected inadvertently!

(b) 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.

(c) Fans or ventilation holes must be kept free from any obstructions. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.

(d) Keep enough insulation distance between mounting screws and internal components of Modular units. Please refer to case drawing on specifications to receive the maximum length of mounting screw.

(e) Recommended wires of Modular units 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^2)	0.75	1.00	1.5	2.5	4	6
Note: The suggested maximum current above only suit for 1-4 strips, 5 or more strips should not exceed 80% of current rating.						

Make sure that all strands of each stranded wire enter the terminal connection and the screw terminals are securely fixed to prevent poor contact.

(f) For other information about the products, please refer to www.meanwell.com for details.

Installation Manual

(3) PCB Type

(a) Before any installation or maintenance work, please disconnect your system from the utility. Ensure that it cannot be re-connected inadvertently!

(b) 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.

(c) Fans or ventilation holes must be kept free from any obstructions. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.

(d) Recommended wires of PCB units 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^2)	0.75	1.00	1.5	2.5	4	6
Note: The suggested maximum current above only suit for 1-4 strips, 5 or more strips should not exceed 80% of current rating.						

Make sure that all strands of each stranded wire enter the terminal connection and the screw terminals are securely fixed to prevent poor contact.

(e) At least 5mm insulation distance on the bottom of PCB units should be kept and a Mylar film should be added between the units and the system. In addition, keep enough insulation distance of 15mm around the PCB units.

(f) PCB units 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.

(g) For other information about the products, please refer to www.meanwell.com for details.

(4) Adapter Type

(a) Before any installation or maintenance work, please disconnect your system from the utility. Ensure that it cannot be re-connected inadvertently!

(b) 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.

(c) Fans or ventilation holes must be kept free from any obstructions. Also a 10-15 cm clearance must be kept when the adjacent device is a heat source.

(d) Before attaching the DC plug of an adaptor to equipment, please unplug the adaptor from the AC power and verify the unit is within the voltage and current rating on the equipment.

(e) Keep the linkage between the adaptor and its power cord tightly as well as connecting the DC plug to equipment properly.

(f) Protect the power cord of adaptors from being trodden on or being squashed.

(g) An approved power cord of an adaptor should greater or equal to SVT, 3G×18AWG or H03VV-F, 3G×0.75mm2.

(h) If the final equipment is not used for long period of time, disconnect the equipment from adaptors to avoid being damaged by voltage peaks or lightning strike.

(i) For other information about the products, please refer to www.meanwell.com for details.

- **User Manual**

NMP series:
http://www.meanwell.com/webapp/product/search.aspx?prod=NMP1K2&pdf=Tk1QLUUucGRm&a=4

Installation Manual

- **Warning / Caution !!**
  (1) Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the power supply by yourself! Please do not install the units in places with high moisture or near the water.
  (2) Please do not install the units in places with high ambient temperature or near fire source. The maximum ambient temperature, please refer to their specifications.
  (3) Output current and output wattage must not exceed the rated values on specifications.
  (4) To avoid risk of electric shock, for class I products, the ground (FG) must be connected to protective earth.
  (5) The Enclosed, Modular and PCB units 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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ISO-9001 CERTIFIED
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Declaration of China RoHS Conformity

In order to reduce the impacts on the environment and take the more responsibility for protecting the earth, MEAN WELL is confirming and announcing the conformity to China RoHS, an Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products.

Environment Friendly Use Period Label

	Observing SJT 11364-2014, Marking for the Restricted Use of Hazardous Substances in Electronic and Electrical Products Observing SJ/Z 11388-2009, General Guidelines of Environment-friendly Use Period of Electronic Information Products Appendix B, adopting table look-up to verify the Environment Friendly Use Period

Names and Contents of Hazardous Substances Lists

Part Name	Hazardous Substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr^{6+})	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
PCB and its components	X	O	X	O	O	O
Metal structure parts	X	O	O	O	O	O
Plastic structure parts	O	O	O	O	O	O
Accessories	O	O	O	O	O	O
Cables	X	O	O	O	O	O

O: The concentration of the hazardous substances within the homogeneous material of that product is less than the concentration limits set by GB/T 26572-2011.
X: The concentration of the hazardous substances within the homogeneous material of that product is over the concentration limits set by GB/T 26572-2011; however, it follows the standard advised by 2011/65/EU.