



750W Power Supply with Single Output

RSP-750 series

#### Dimension

| L    | * | W   | * | H         |      |
|------|---|-----|---|-----------|------|
| 250  | * | 127 | * | 41 (1U)   | mm   |
| 9.84 | * | 5   | * | 1.61 (1U) | inch |

User's Manual



## Features

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 92%
- Forced air cooling by built-in DC fan
- Output voltage and constant current level programmable
- Built-in remote ON-OFF control / remote sense / auxiliary power / DC OK signal
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional conformal coating
- 5 years warranty

## Applications

- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Burn-in facility
- RF application

## GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

## Description

RSP-750 is a 750W single output enclosed type AC/DC power supply. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the built-in fan with fan speed control, working for the temperature up to 70°C. Moreover, RSP-750 provides vast design flexibility by equipping various built-in functions such as the output programming, remote ON-OFF control, auxiliary power, etc.

## Model Encoding / Order Information

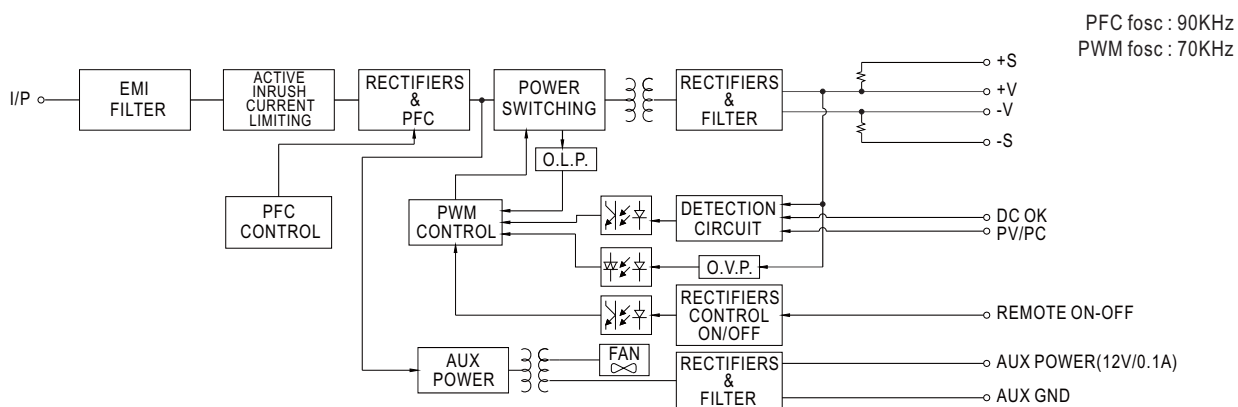
RSP - 750 - 48

- Output voltage (5V/12V/15V/24V/27V/48V)
- Output wattage
- Series name

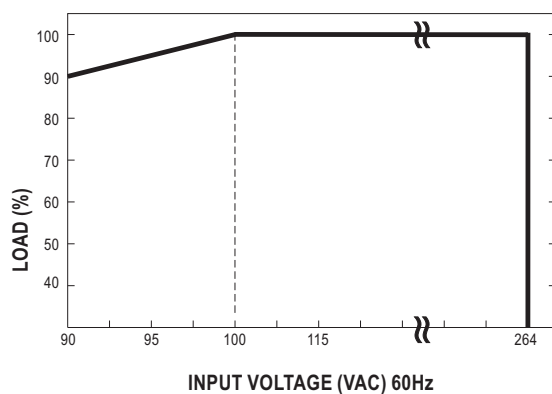
## SPECIFICATION

| MODEL                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RSP-750-5                                                                                                                                                                   | RSP-750-12                                                                                                             | RSP-750-15            | RSP-750-24   | RSP-750-27                                                               | RSP-750-48   |  |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------|--------------------------------------------------------------------------|--------------|--|
| OUTPUT                                  | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 5V                                                                                                                                                                          | 12V                                                                                                                    | 15V                   | 24V          | 27V                                                                      | 48V          |  |
|                                         | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 100A                                                                                                                                                                        | 62.5A                                                                                                                  | 50A                   | 31.3A        | 27.8A                                                                    | 15.7A        |  |
|                                         | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0 ~ 100A                                                                                                                                                                    | 0 ~ 62.5A                                                                                                              | 0 ~ 50A               | 0 ~ 31.3A    | 0 ~ 27.8A                                                                | 0 ~ 15.7A    |  |
|                                         | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 500W                                                                                                                                                                        | 750W                                                                                                                   | 750W                  | 751.2W       | 750.6W                                                                   | 753.6W       |  |
|                                         | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 150mVp-p                                                                                                                                                                    | 150mVp-p                                                                                                               | 150mVp-p              | 150mVp-p     | 150mVp-p                                                                 | 150mVp-p     |  |
|                                         | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4.75 ~ 5.5V                                                                                                                                                                 | 10 ~ 13.5V                                                                                                             | 13.5 ~ 16.5V          | 20 ~ 26.4V   | 24 ~ 30V                                                                 | 43 ~ 55V     |  |
|                                         | VOLTAGE TOLERANCE <small>Note.3</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ±2.0%                                                                                                                                                                       | ±1.0%                                                                                                                  | ±1.0%                 | ±1.0%        | ±1.0%                                                                    | ±1.0%        |  |
|                                         | LINE REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±0.5%                                                                                                                                                                       | ±0.5%                                                                                                                  | ±0.5%                 | ±0.5%        | ±0.5%                                                                    | ±0.5%        |  |
|                                         | LOAD REGULATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ±2.0%                                                                                                                                                                       | ±0.5%                                                                                                                  | ±0.5%                 | ±0.5%        | ±0.5%                                                                    | ±0.5%        |  |
|                                         | SETUP, RISE TIME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000ms, 50ms at full load                                                                                                                                                   |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | HOLD UP TIME (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 16ms/230VAC                                                                                                                                                                 | 16ms/115VAC at full load                                                                                               |                       |              |                                                                          |              |  |
| INPUT                                   | VOLTAGE RANGE <small>Note.4</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90 ~ 264VAC                                                                                                                                                                 | 127 ~ 370VDC                                                                                                           |                       |              |                                                                          |              |  |
|                                         | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 47 ~ 63Hz                                                                                                                                                                   |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.97/230VAC                                                                                                                                                                 | 0.98/115VAC at full load                                                                                               |                       |              |                                                                          |              |  |
|                                         | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 82%                                                                                                                                                                         | 87%                                                                                                                    | 89%                   | 90.5%        | 90.5%                                                                    | 92%          |  |
|                                         | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5V : 5.6A/115VAC                                                                                                                                                            | 2.8A/230VAC                                                                                                            | 12V~48V : 8.2A/115VAC | 3.9A/230VAC  |                                                                          |              |  |
|                                         | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 25A/115VAC                                                                                                                                                                  | 40A/230VAC                                                                                                             |                       |              |                                                                          |              |  |
|                                         | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <2.0mA / 240VAC                                                                                                                                                             |                                                                                                                        |                       |              |                                                                          |              |  |
| PROTECTION                              | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 105 ~ 125% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed                                       |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | OVER VOLTAGE (OVP)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5.75 ~ 6.75V                                                                                                                                                                | 13.8 ~ 16.8V                                                                                                           | 17 ~ 20.5V            | 27.6 ~ 32.4V | 31 ~ 36.5V                                                               | 56.6 ~ 66.2V |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Protection type : Shut down o/p voltage, re-power on to recover                                                                                                             |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Shut down o/p voltage, recovers automatically after temperature goes down                                                                                                   |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | FUNCTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | OUTPUT VOLTAGE PROGRAMMABLE(PV)                                                                                                                                             | Adjustment of output voltage is allowable to 40 ~ 110% of nominal output voltage. Please refer to the Function Manual. |                       |              |                                                                          |              |  |
|                                         | CONSTANT CURRENT LEVEL PROGRAMMABLE(PC)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Adjustment of constant current level is allowable to 40 ~ 110% of rated current. Please refer to the Function Manual.                                                       |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | AUXILIARY POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 12V @ 0.1A ; tolerance : ± 10%                                                                                                                                              |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | REMOTE ON-OFF CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Power on : short between <i>Remote ON-OFF(pin13)</i> & <i>12V-AUX(pin14)</i> on CN50    Power off : open between <i>Remote ON-OFF(pin13)</i> & <i>12-AUX(pin14)</i> on CN50 |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | DC OK SIGNAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The TTL signal out, power supply turn on = 0 ~ 1V ; power supply turn off = 3.3 ~ 5.6V                                                                                      |                                                                                                                        |                       |              |                                                                          |              |  |
| ENVIRONMENT                             | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | -30 ~ +70℃ (Refer to "Derating Curve")                                                                                                                                      |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 20 ~ 90% RH non-condensing                                                                                                                                                  |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | -40 ~ +85℃, 10 ~ 95% RH non-condensing                                                                                                                                      |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ±0.03%/℃ (0 ~ 50℃)                                                                                                                                                          |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                                                |                                                                                                                        |                       |              |                                                                          |              |  |
| SAFETY & EMC<br><small>(Note 7)</small> | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | UL62368-1, CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, CCC GB4943.1, BSMI CNS14336-1, AS/NZS62368.1, EAC TP TC 004 approved                                                 |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC                                                                                                                             |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                   |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Parameter                                                                                                                                                                   | Standard                                                                                                               |                       |              | Test Level / Note                                                        |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Conducted                                                                                                                                                                   | BS EN/EN55032 (CISPR32)                                                                                                |                       |              | Class B                                                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Radiated                                                                                                                                                                    | BS EN/EN55032 (CISPR32)                                                                                                |                       |              | Class B                                                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Harmonic Current                                                                                                                                                            | BS EN/EN61000-3-2                                                                                                      |                       |              | -----                                                                    |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Voltage Flicker                                                                                                                                                             | BS EN/EN61000-3-3                                                                                                      |                       |              | -----                                                                    |              |  |
|                                         | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                             | BS EN/EN55035, BS EN/EN61000-6-2, CCC GB17625.1, GB/T9254, BSMI CNS13438                                               |                       |              |                                                                          |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Parameter                                                                                                                                                                   | Standard                                                                                                               |                       |              | Test Level / Note                                                        |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ESD                                                                                                                                                                         | BS EN/EN61000-4-2                                                                                                      |                       |              | Level 3, 8KV air ; Level 2, 4KV contact                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Radiated                                                                                                                                                                    | BS EN/EN61000-4-3                                                                                                      |                       |              | Level 3                                                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EFT / Burst                                                                                                                                                                 | BS EN/EN61000-4-4                                                                                                      |                       |              | Level 3                                                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Surge                                                                                                                                                                       | BS EN/EN61000-4-5                                                                                                      |                       |              | Level 4, 4KV/Line-Earth ; Level 3, 2KV/Line-Line                         |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Conducted                                                                                                                                                                   | BS EN/EN61000-4-6                                                                                                      |                       |              | Level 3                                                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Magnetic Field                                                                                                                                                              | BS EN/EN61000-4-8                                                                                                      |                       |              | Level 4                                                                  |              |  |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Voltage Dips and Interruptions                                                                                                                                              | BS EN/EN61000-4-11                                                                                                     |                       |              | >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods |              |  |
| OTHERS                                  | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1036.8K hrs min.    Telcordia SR-332 (Bellcore) ; 109.2K hrs min.    MIL-HDBK-217F (25℃)                                                                                    |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 250*127*41mm (L*W*H)                                                                                                                                                        |                                                                                                                        |                       |              |                                                                          |              |  |
|                                         | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.64Kg; 6pcs/10.8Kg/1.1CUFT                                                                                                                                                 |                                                                                                                        |                       |              |                                                                          |              |  |
| NOTE                                    | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>4. Derating may be needed under low input voltages. Please check the derating curve for more details.<br>5. There is high possibility to trigger the floating over voltage protection when PV voltage is trimmed from a high voltage level to a lower voltage level at light load or no load condition. It is suggested that turn off the power supply and set PV voltage to the lowest level, then adjust output voltage to a desired value.<br>6. Strongly recommended that external output capacitance should not exceed 5000uF. (Only for: RSP-750-5)<br>7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |                                                                                                                                                                             |                                                                                                                        |                       |              |                                                                          |              |  |

### ■ Block Diagram

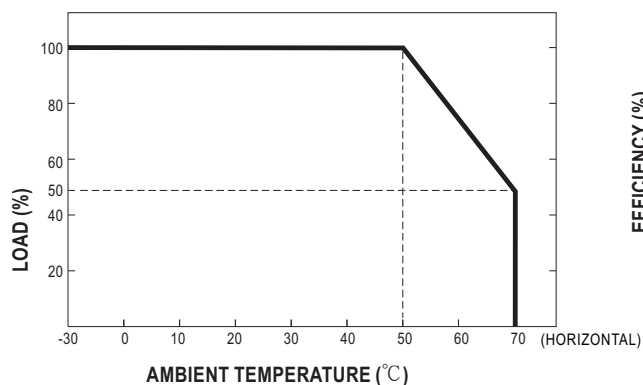


### ■ Static Characteristics

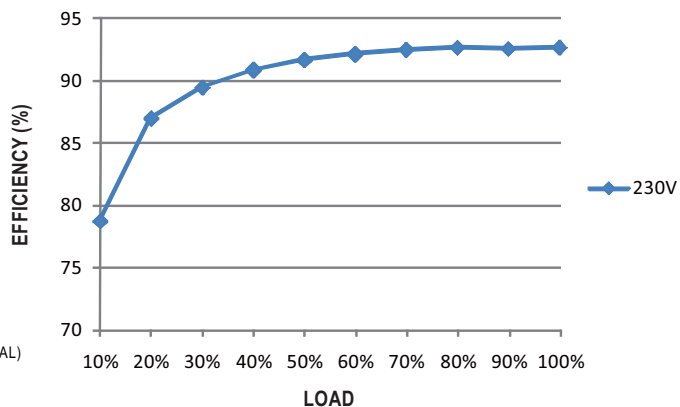


| <b>MODEL</b><br><b>INPUT</b> | <b>5V</b>         | <b>12V</b>        | <b>15V</b>        |
|------------------------------|-------------------|-------------------|-------------------|
| 100~264VAC                   | 500W<br>100A      | 750W<br>62.5A     | 750W<br>50A       |
| 90VAC                        | 450W<br>90A       | 675W<br>56.25A    | 675W<br>45A       |
| <b>MODEL</b><br><b>INPUT</b> | <b>24V</b>        | <b>27V</b>        | <b>48V</b>        |
| 100~264VAC                   | 751.2W<br>31.3A   | 750.6W<br>27.8A   | 753.6W<br>15.7A   |
| 90VAC                        | 676.08W<br>28.17A | 675.54W<br>25.02A | 678.24W<br>14.13A |

### Derating Curve



### ■ Efficiency vs Load (48V Model)



※ The curve above is measured at 230VAC.

## Function Manual

### 1.Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V.

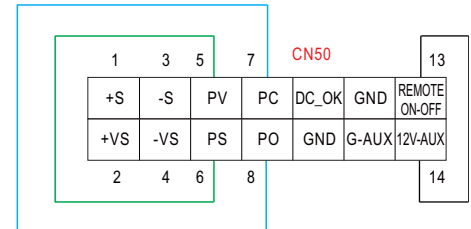
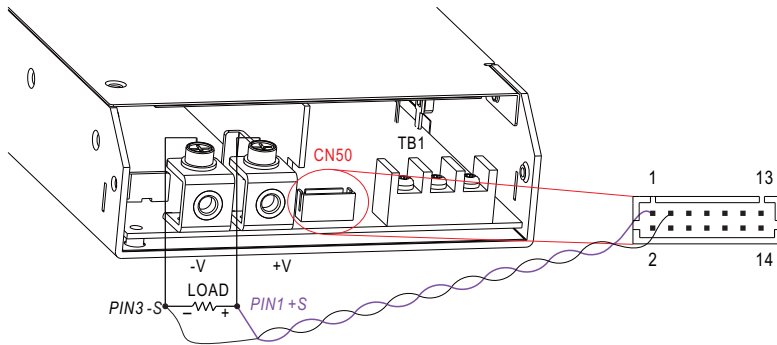


Fig 1.1

- ⊙ The +S signal should be connected to the positive terminal of the load whereas -S signal to the negative terminal.
- ⊙ By factory default, on CN50, Remote ON-OFF (pin13) and 12V-AUX (pin14), PV(pin5) and PS (pin6), and PC (pin7) and PO (pin8), respectively, are shorted when shipped. The power supply will have no output if the shorting connector is not assembled unless certain function needs to be activated.

### 2.Remote ON-OFF

※ The power supply can be turned ON/OFF by using the "Remote ON-OFF" function.

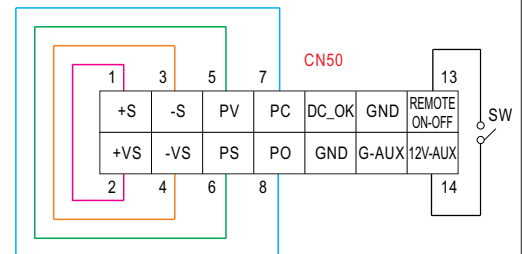
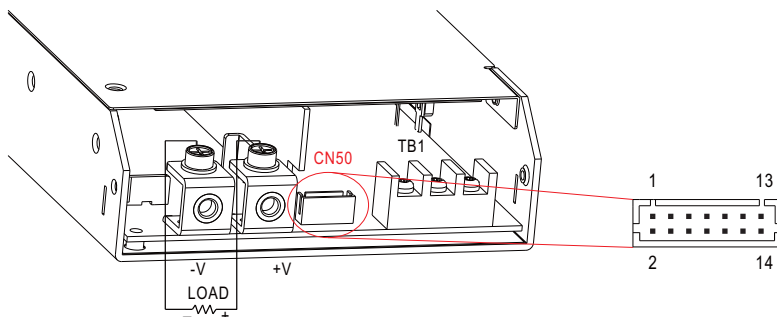


Fig 2.1

| Between Remote ON-OFF(pin13) and 12V-AUX(pin14) | Power Supply Status |
|-------------------------------------------------|---------------------|
| SW close (Short)                                | ON                  |
| SW open (Open)                                  | OFF                 |

- ⊙ When multiple power supplies need to turn ON/OFF simultaneously by Remote ON-OFF control, -S & -V on CN50, as well as +S & +V, on each power supply should be connected.

### 3. Output Voltage Programming (or, PV / remote voltage programming / remote adjust / margin programming / dynamic voltage trim)

※ In addition to the adjustment via the built-in potentiometer, the output voltage can be trimmed to 40~110% of the nominal voltage by applying EXTERNAL VOLTAGE.

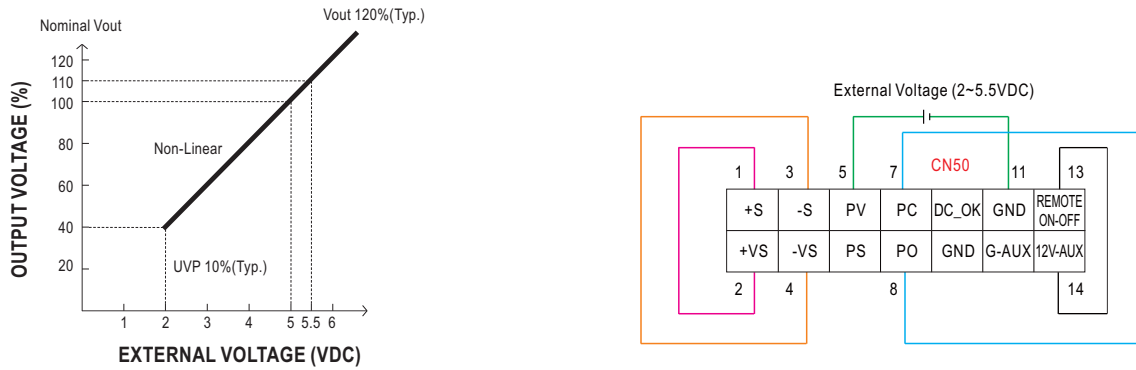


Fig 3.1

◎ If EXTERNAL VOLTAGE (VDC) <0.5V, the power supply may enter under voltage protection; it needs to be restarted to work.

※ Caution: By factory default, the Output Voltage Programming is not activated, and PV (pin5) and PS (pin6) are shorted by connector. Whenever this function is not needed to activate, as assumed in other sections' diagrams, please keep PV (pin5) and PS (pin6) shorted ; other wise, the power supply will have no output.

### 4. Constant Current Level Programming (or, PC / remote current programming / dynamic current trim)

※ The constant current level can be trimmed to 40~110% of the rated current by applying EXTERNAL VOLTAGE.

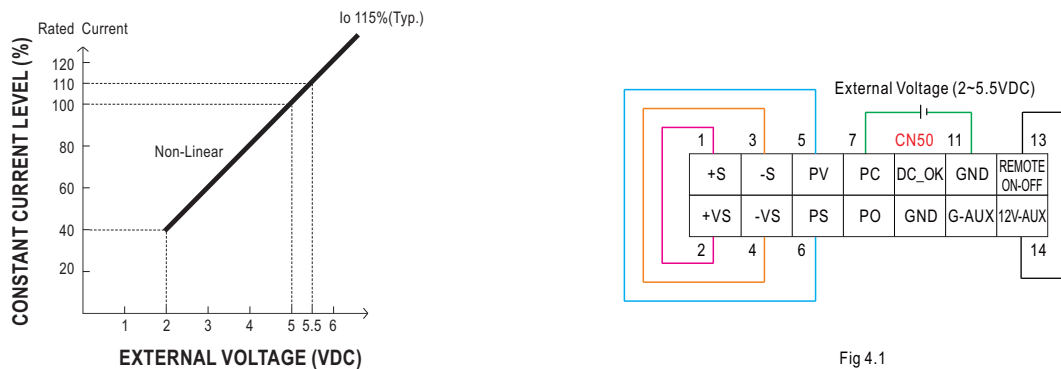
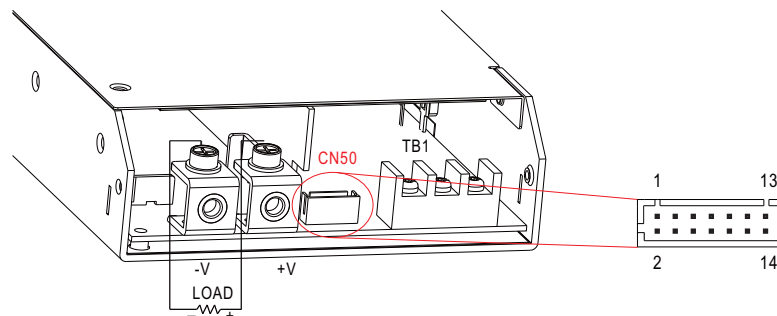


Fig 4.1

※ Caution: By factory default, the Output Current Programming is not activated, and PC (pin7) and PO (pin8) are shorted by connector. Whenever this function is not needed to activate, as assumed in other sections' diagrams, please keep PC (pin7) and PO (pin8) shorted ; otherwise, the power supply will have no output.



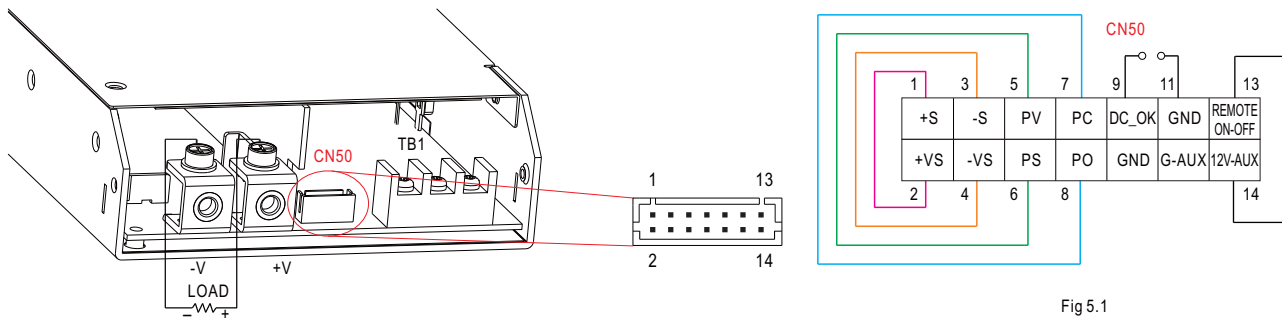
## 5.DC\_OK signal

※ "DC\_OK" is an open collector signal. It indicates the output status of the power supply. It can operate in two ways : One is sinking current from external TTL signal ; the other is sending out a TTL voltage signal.

◎ **Sinking current from external TTL signal:** The maximum sink current is 10mA and the maximum external voltage is 5.6V.

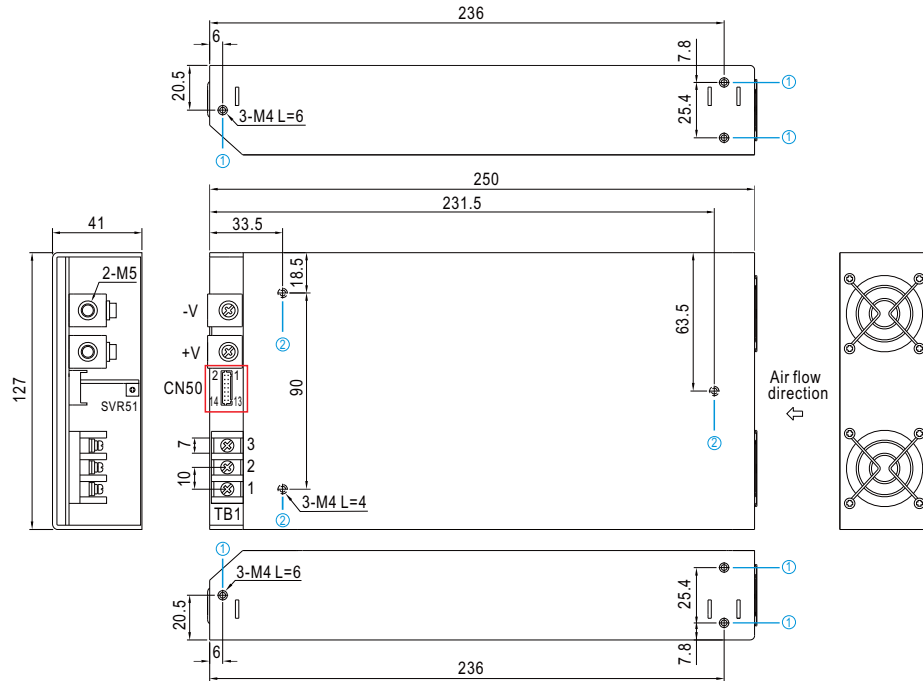
◎ **Sending out TTL voltage signal :**

| Between DC- OK(pin9) and GND(pin10&11) | Output Status    |
|----------------------------------------|------------------|
| 0 ~ 1V                                 | Power supply ON  |
| 3.3 ~ 5.6V                             | Power supply OFF |



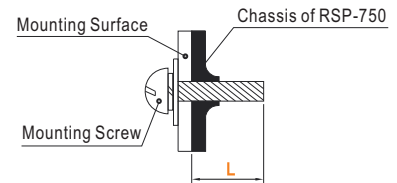
## Mechanical Specification

Case No.212A Unit:mm

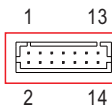


### ※ Mounting Instruction

| Hole No. | Recommended Screw Size | MAX. Penetration Depth L | Recommended mounting torque |
|----------|------------------------|--------------------------|-----------------------------|
| ①        | M4                     | 6mm                      | 7~11Kgf-cm                  |
| ②        | M4                     | 4mm                      | 7~11Kgf-cm                  |



### ※ Control Pin No. Assignment (CN50) : HRS DF11-14DP-2DS or equivalent



|                |                             |
|----------------|-----------------------------|
| Mating Housing | HRS DF11-14DS or equivalent |
| Terminal       | HRS DF11-14SC or equivalent |

| Pin No. | Function      | Description                                                                                                                                                        |
|---------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | +S            | Positive sensing for remote sense.                                                                                                                                 |
| 2       | +VS           | +V Signal. The +VS should be connected to the +S to reduce the noise when "output voltage programming" function is in use.                                         |
| 3       | -S            | Negative sensing for remote sense.                                                                                                                                 |
| 4       | -VS           | -V Signal. The -VS should be connected to the -S to reduce the noise when "output voltage programming" function is in use.                                         |
| 5       | PV            | Connect to external DC voltage source for output voltage programming, referenced to pin 10,11 (GND).                                                               |
| 6       | PS            | Reference pin regarding output voltage programming. Please refer to the Function Manual.                                                                           |
| 7       | PC            | Connect to external DC voltage source for output current programming.                                                                                              |
| 8       | PO            | Reference pin regarding output current programming. Please refer to the Function Manual.                                                                           |
| 9       | DC_OK         | Open collector signal, referenced to pin10,11(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 5.6V.              |
| 10,11   | GND           | These pins connect to the negative terminal (-V). Return for DC_OK Signal output.                                                                                  |
| 12      | G-AUX         | Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).                                                                |
| 13      | REMOTE ON-OFF | Turns the output on and off by electrical or dry contact between pin 13 ( ON/OFF) and pin 14 (12V-AUX). Short: Power ON, Open: Power OFF.                          |
| 14      | 12V-AUX       | Auxiliary voltage output, 10.8~13.2V, referenced to pin 12(G-AUX). The maximum load current is 0.1A. This output is not controlled by the "remote ON/OFF control". |



※AC Input Terminal Pin No. Assignment

| Pin No. | Assignment | Diagram                                                                           | Maximum mounting torque |
|---------|------------|-----------------------------------------------------------------------------------|-------------------------|
| 1       | AC/N       |  | 18Kgf-cm                |
| 2       | AC/L       |                                                                                   |                         |
| 3       | FG $\perp$ |                                                                                   |                         |

※DC Output Terminal Pin No. Assignment

| Assignment | Diagram                                                                           | Maximum mounting torque |
|------------|-----------------------------------------------------------------------------------|-------------------------|
| +V, -V     |  | 10Kgf-cm                |

■ **Installation Manual**

Please refer to : <http://www.meanwell.com/manual.html>