



1500W Single Output Power Supply

**RSP-1500 series**

User's Manual



[Click Me](#)

#### Dimension

| L    | * | W   | * | H        |      |
|------|---|-----|---|----------|------|
| 278  | * | 127 | * | 83.5(2U) | mm   |
| 10.9 | * | 5   | * | 3.29(2U) | inch |



## ■ Features

- Universal AC input / Full range
- Built-in active PFC function
- High efficiency up to 91%
- Forced air cooling by built-in DC fan
- Output voltage programmable
- Active current sharing up to 6000W (3+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / power 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
- Digital broadcasting
- RF application

## ■ GTIN CODE

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

## ■ Description

RSP-1500 is a 1.5KW 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 working for the temperature up to 70°C. Moreover, RSP-1500 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

## ■ Model Encoding / Order Information

**RSP - 1500 - 48**

Output voltage (5V/12V/15V/24V/27V/48V)

Output wattage

Series name



## 1500W Single Output Power Supply

## RSP-1500 series

## SPECIFICATION

| MODEL                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | RSP-1500-5                                                                                                                                     | RSP-1500-12                            | RSP-1500-15              | RSP-1500-24                                                              | RSP-1500-27                                      | RSP-1500-48  |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------|--------------------------------------------------------------------------|--------------------------------------------------|--------------|
| OUTPUT                                  | DC VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5V                                                                                                                                             | 12V                                    | 15V                      | 24V                                                                      | 27V                                              | 48V          |
|                                         | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 240A                                                                                                                                           | 125A                                   | 100A                     | 63A                                                                      | 56A                                              | 32A          |
|                                         | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0 ~ 240A                                                                                                                                       | 0 ~ 125A                               | 0 ~ 100A                 | 0 ~ 63A                                                                  | 0 ~ 56A                                          | 0 ~ 32A      |
|                                         | RATED POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1200W                                                                                                                                          | 1500W                                  | 1500W                    | 1512W                                                                    | 1512W                                            | 1536W        |
|                                         | RIPPLE & NOISE (max.) <small>Note.2</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 150mVp-p                                                                                                                                       | 150mVp-p                               | 150mVp-p                 | 150mVp-p                                                                 | 150mVp-p                                         | 200mVp-p     |
|                                         | VOLTAGE ADJ. RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4.5 ~ 5.5V                                                                                                                                     | 10 ~ 13.5V                             | 13.5 ~ 16.5V             | 20 ~ 26.4V                                                               | 24 ~ 30V                                         | 43 ~ 56V     |
|                                         | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1500ms, 100ms at full load                                                                                                                     |                                        |                          |                                                                          |                                                  |              |
| HOLD UP TIME (Typ.)                     | 10ms at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                |                                        | 14ms at full load        |                                                                          | 16ms at full load                                |              |
| INPUT                                   | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 90 ~ 264VAC     250 ~ 370VDC                                                                                                                   |                                        |                          |                                                                          |                                                  |              |
|                                         | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 47 ~ 63Hz                                                                                                                                      |                                        |                          |                                                                          |                                                  |              |
|                                         | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.95/230VAC                                                                                                                                    |                                        | 0.98/115VAC at full load |                                                                          |                                                  |              |
|                                         | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 80%                                                                                                                                            | 87%                                    | 87%                      | 90%                                                                      | 90%                                              | 91%          |
|                                         | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 17A/115VAC     8A/230VAC                                                                                                                       |                                        |                          |                                                                          |                                                  |              |
|                                         | INRUSH CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 30A/115VAC     60A/230VAC                                                                                                                      |                                        |                          |                                                                          |                                                  |              |
|                                         | LEAKAGE CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <2.0mA / 240VAC                                                                                                                                |                                        |                          |                                                                          |                                                  |              |
| PROTECTION                              | OVERLOAD <small>Note.4</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 105 ~135% rated output power<br>Protection type : Constant current limiting unit will shut down o/p voltage after 5sec. Re-power on to recover |                                        |                          |                                                                          |                                                  |              |
|                                         | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5.75 ~ 6.75V                                                                                                                                   | 13.8 ~ 16.8V                           | 17 ~ 20.5V               | 27.6 ~ 32.4V                                                             | 31 ~ 36.5V                                       | 57.6 ~ 67.2V |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 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 70 ~ 100% of nominal output voltage. Please refer to the Function Manual.                         |                                        |                          |                                                                          |                                                  |              |
|                                         | CURRENT SHARING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Up to 6000W or (3+1) units. Please refer to the Function Manual.                                                                               |                                        |                          |                                                                          |                                                  |              |
|                                         | AUXILIARY POWER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 12V@0.1A(Only for Remote ON-OFF control)                                                                                                       |                                        |                          |                                                                          |                                                  |              |
|                                         | REMOTE ON-OFF CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Please see the Function Manual.                                                                                                                |                                        |                          |                                                                          |                                                  |              |
|                                         | REMOTE SENSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Compensate voltage drop on the load wiring up to 0.3V. Please refer to the Function Manual.                                                    |                                        |                          |                                                                          |                                                  |              |
|                                         | ALARM SIGNAL OUTPUT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Power OK signal. Please see the Function Manual.                                                                                               |                                        |                          |                                                                          |                                                  |              |
| ENVIRONMENT                             | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -20 ~ +70℃ (Refer to "Derating Curve")                                                                                                         |                                        |                          |                                                                          |                                                  |              |
|                                         | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20 ~ 90% RH non-condensing                                                                                                                     |                                        |                          |                                                                          |                                                  |              |
|                                         | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -40 ~ +85℃, 10 ~ 95% RH non-condensing                                                                                                         |                                        |                          |                                                                          |                                                  |              |
|                                         | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ±0.05%/℃ (0 ~ 50℃)                                                                                                                             |                                        |                          |                                                                          |                                                  |              |
|                                         | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                                                                   |                                        |                          |                                                                          |                                                  |              |
| SAFETY & EMC<br><small>(Note 5)</small> | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | UL62368-1, CAN/CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, BSMI CNS15598-1, 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), BSMI CNS15936 |                          |                                                                          | Class B/Class A (only for BSMI)                  |              |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Radiated                                                                                                                                       | BS EN/EN55032 (CISPR32), BSMI CNS15936 |                          |                                                                          | Class A                                          |              |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Harmonic Current                                                                                                                               | BS EN/EN61000-3-2                      |                          |                                                                          | -----                                            |              |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Voltage Flicker                                                                                                                                | BS EN/EN61000-3-3                      |                          |                                                                          | -----                                            |              |
|                                         | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | BS EN/EN55035, BS EN/EN61000-6-2                                                                                                               |                                        |                          |                                                                          |                                                  |              |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 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 2                                          |              |
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Surge                                                                                                                                          | BS EN/EN61000-4-5                      |                          |                                                                          | Level 3, 2KV/Line-Earth ; Level 2, 1KV/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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 814.4K hrs min.    Telcordia SR-332 (Bellcore) ; 90.4K hrs min.    MIL-HDBK-217F (25℃)                                                         |                                        |                          |                                                                          |                                                  |              |
|                                         | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 278*127*83.5mm (L*W*H)                                                                                                                         |                                        |                          |                                                                          |                                                  |              |
|                                         | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.0Kg; 4pcs/13Kg/1.19CUFT                                                                                                                      |                                        |                          |                                                                          |                                                  |              |
| 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. 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."<br>(as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )<br>6. 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> |                                                                                                                                                |                                        |                          |                                                                          |                                                  |              |





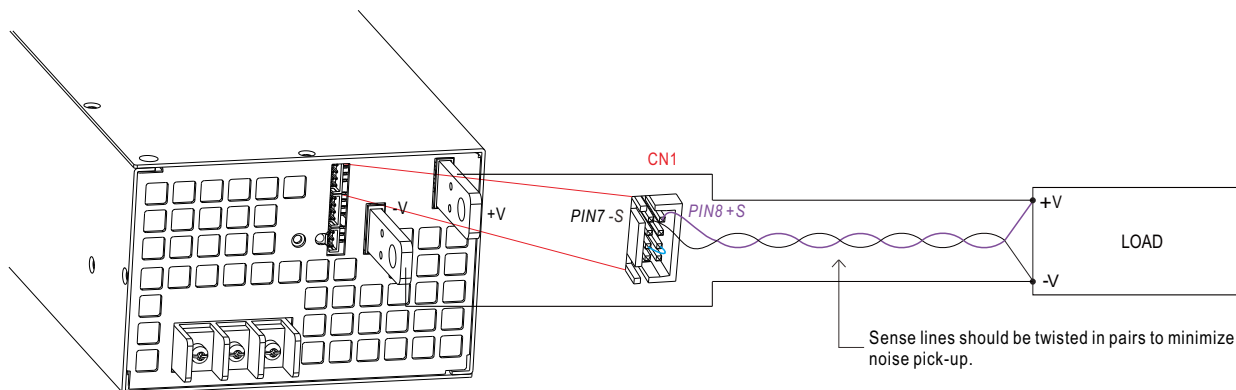
## 1500W Single Output Power Supply

# RSP-1500 series

### Function Manual

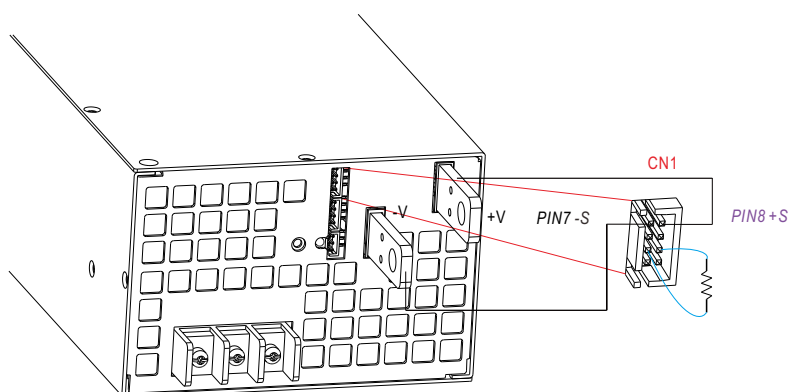
#### 1. Remote Sense

※ The Remote Sense compensates voltage drop on the load wiring up to 0.3V



#### 2. 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 70~100%(Typ.) of the nominal voltage by applying EXTERNAL RESISTANCE



◎ Connect an external resistor with a 0.25W rating or above between *TRIM(pin4)* & *-S(pin3 or pin5 or pin7)* on CN1 or CN2, and +S & +V, -S & -V also need to be connected.

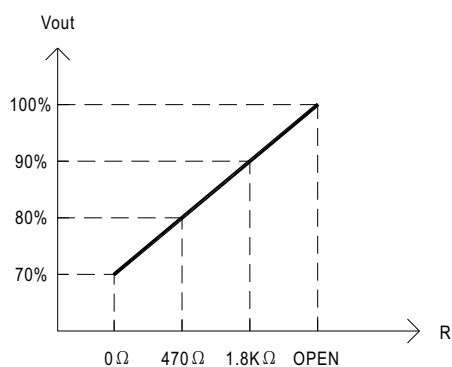


Fig. 2.2 External Resistance (Typical)

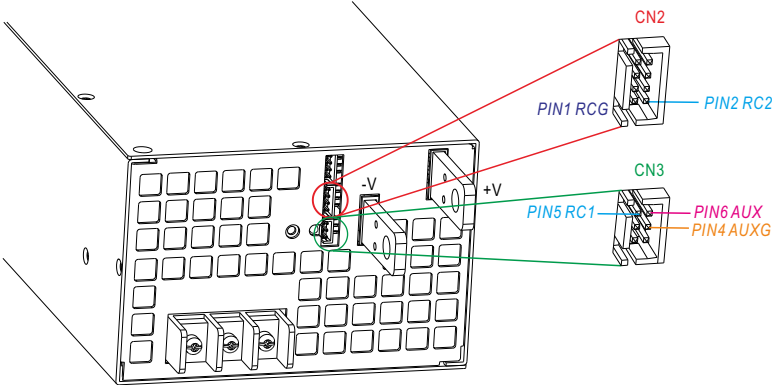


1500W Single Output Power Supply

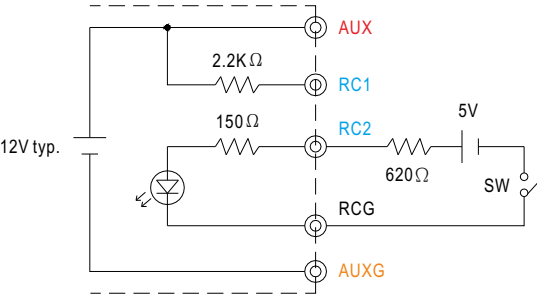
RSP-1500 series

3.Remote ON-OFF

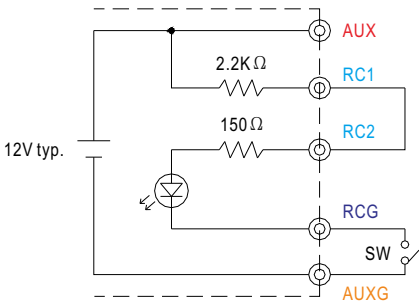
※ Remote ON-OFF is activated by the configuration with respect to CN1,CN2 and CN3 as shown in the following diagram.



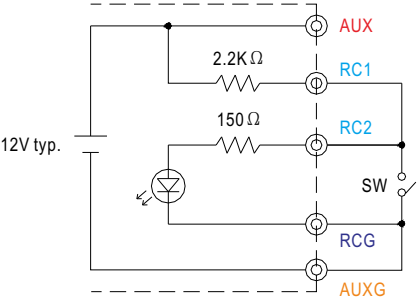
Example 3.2(A): Using external voltage source



Example 3.2(B): Using internal 12V auxiliary output



Example 3.2(C): Using internal 12V auxiliary output



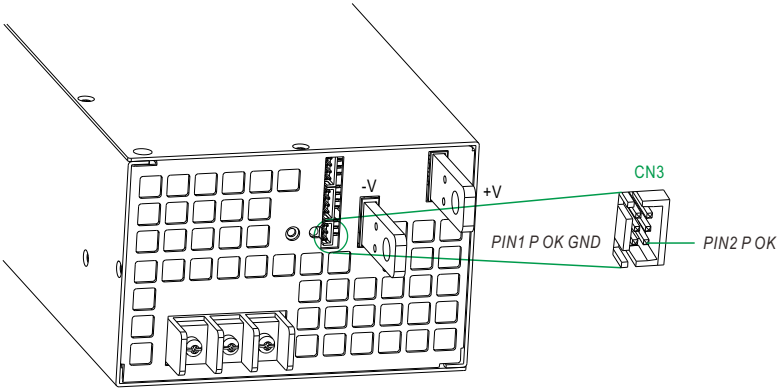
© Connection Method

|          |            | Fig. 3.2(A) | Fig. 3.2(B) | Fig. 3.2(C) |
|----------|------------|-------------|-------------|-------------|
| SW Logic | Output on  | SW Open     | SW Open     | SW Close    |
|          | Output off | SW Close    | SW Close    | SW Open     |



4.Alarm Signal Output

※ Alarm signal is sent out through "P OK" & "P OK GND" and pins on CN3. Please acknowledge an external voltage source is required for this function.



| Function | Description                                                                                                      | Output of alarm(P OK)                                |
|----------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| P OK     | The signal is "Low" when the power supply is above 65% of the rated output voltage, or say, Power OK             | Low<br>(0.5V max at 10mA)                            |
|          | The signal turns to be "High" when the power supply is under 65% of the rated output voltage, or say, Power Fail | High or open<br>(External applied voltage 10mA max.) |

Table 4.1 Explanation of alarm

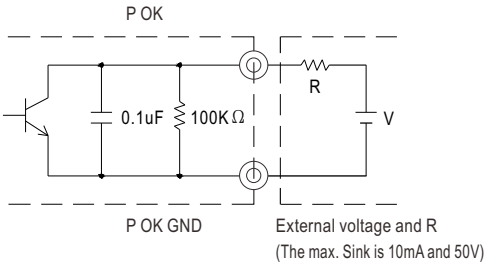


Fig. 4.1 Internal circuit of P OK (Open collector method)



## 1500W Single Output Power Supply

# RSP-1500 series

### 5. Current Sharing with Remote Sense

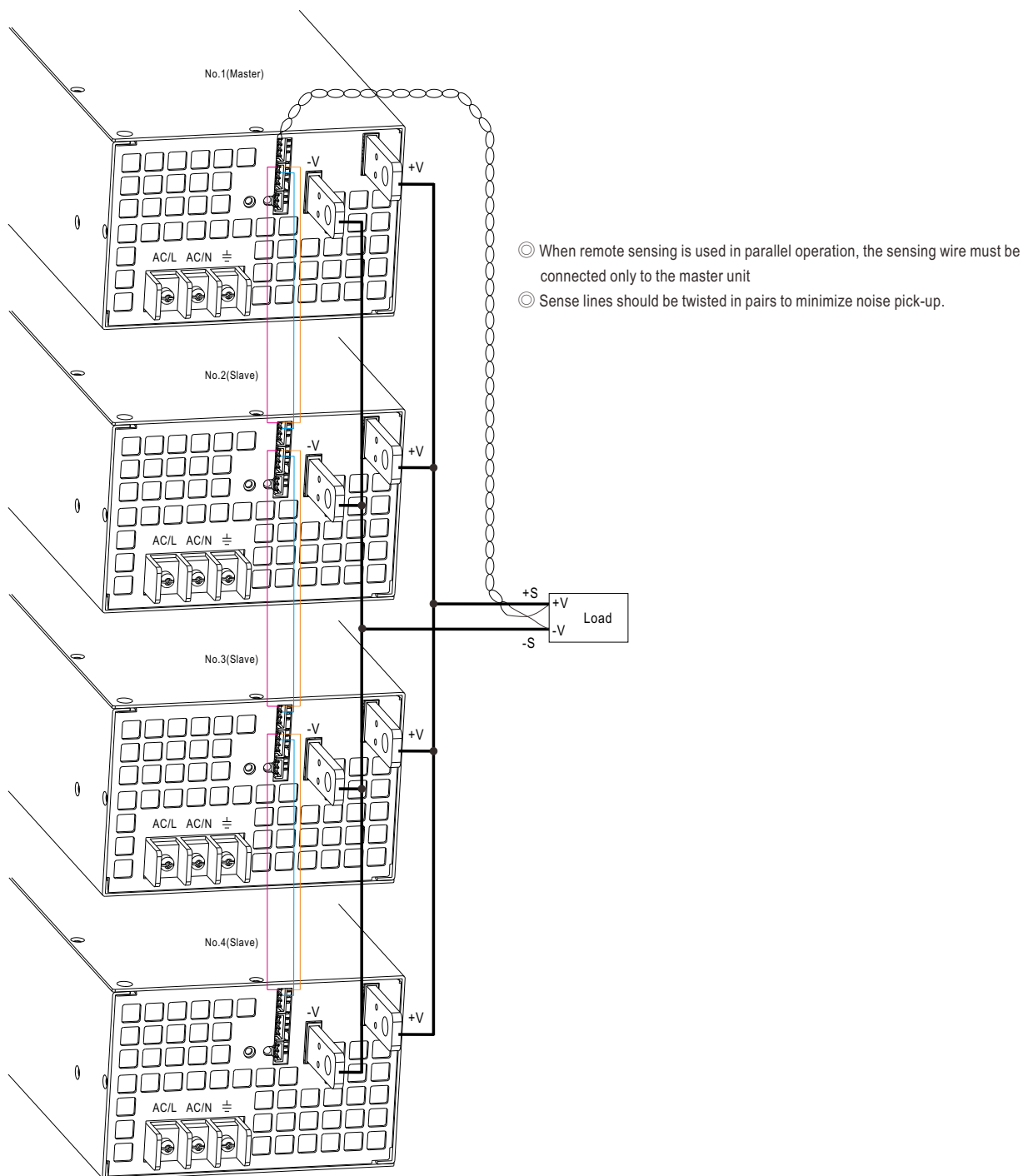
RSP-1500 has the built-in active current sharing function and can be connected in parallel, up to 4 units, to provide higher output power as exhibited below :

※ The power supplies should be paralleled using short and large diameter wiring and then connected to the load.

※ Difference of output voltages among parallel units should be less than 0.2V.

※ The total output current must not exceed the value determined by the following equation:

$$\text{Maximum output current at parallel operation} = (\text{Rated current per unit}) \times (\text{Number of unit}) \times 0.9$$



◎ +S, -S and CS are connected mutually in parallel.



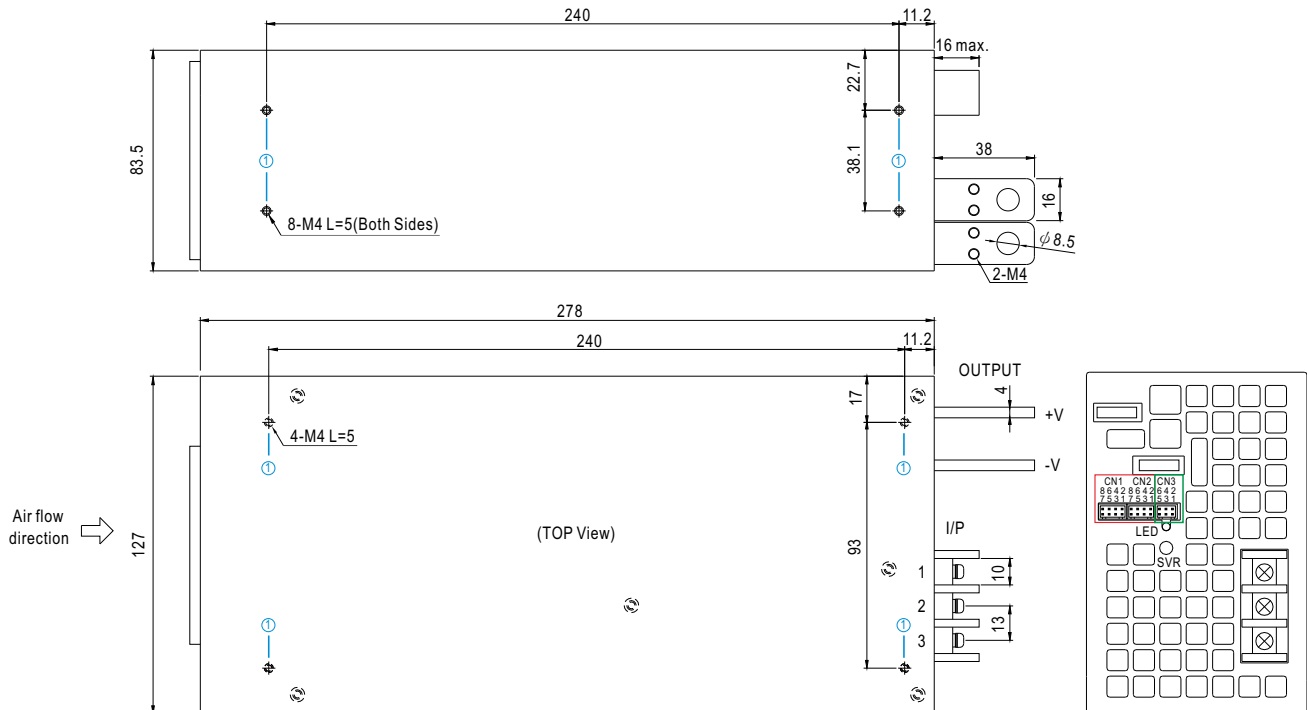
## 1500W Single Output Power Supply

## RSP-1500 series

## ■ Mechanical Specification

(Unit: mm , tolerance  $\pm 0.5\text{mm}$ )

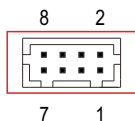
Case No.943A



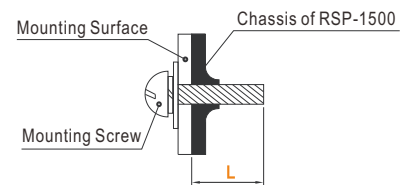
## ※ Mounting Instruction

| Hole No. | Recommended Screw Size | MAX. Penetration Depth L | Recommended mounting torque |
|----------|------------------------|--------------------------|-----------------------------|
| ①        | M4                     | 5mm                      | 7~10Kgf-cm                  |

※ Control Pin No. Assignment (CN1,CN2) : HRS DF11-8DP-2DS or equivalent



|                |                             |
|----------------|-----------------------------|
| Mating Housing | HRS DF11-8DS or equivalent  |
| Terminal       | HRS DF11-**SC or equivalent |



© CN1 and CN2 are connected internally.

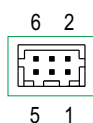
| Pin No. | Function          | Description                               |
|---------|-------------------|-------------------------------------------|
| 1       | RCG               | Remote ON-OFF Ground                      |
| 2       | RC2               | Remote ON-OFF                             |
| 3,5,7   | -S                | Negative sensing for remote sense         |
| 4       | TRIM              | Connection for output voltage programming |
| 6       | LS(Current Share) | Current Share                             |
| 8       | +S                | Positive sensing for remote sense         |



## 1500W Single Output Power Supply

## RSP-1500 series

※Control Pin No. Assignment (CN3) : HRS DF11-6DP-2DS or equivalent



|                |                              |
|----------------|------------------------------|
| Mating Housing | HRS DF11-6DS or equivalent   |
| Terminal       | HRS DF11-6**SC or equivalent |

| Pin No. | Function | Description          |
|---------|----------|----------------------|
| 1       | P OK GND | Power OK Ground      |
| 2       | P OK     | Power OK Signal      |
| 3       | RCG      | Remote ON-OFF Ground |
| 4       | AUXG     | Auxiliary Ground     |
| 5       | RC1      | Remote ON-OFF        |
| 6       | AUX      | Auxiliary Output     |

※AC Input Terminal Pin No. Assignment

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