

## MMP PS-1000W-12V



### ■ Features

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 94%
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in cooling fan ON-OFF control
- Current sharing up to 4000W (3+1)
- Built-in DC OK signal
- Built-in remote ON-OFF control
- Standby 5V@0.3A
- Built-in remote sense function
- No load power consumption<0.75W (Note.6)
- 5 years warranty

### ■ Certificates

- Safety: UL/EN62368-1
- EMC: EN55032

### ■ Applications

- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Aging equipment
- RF application

### ■ Description

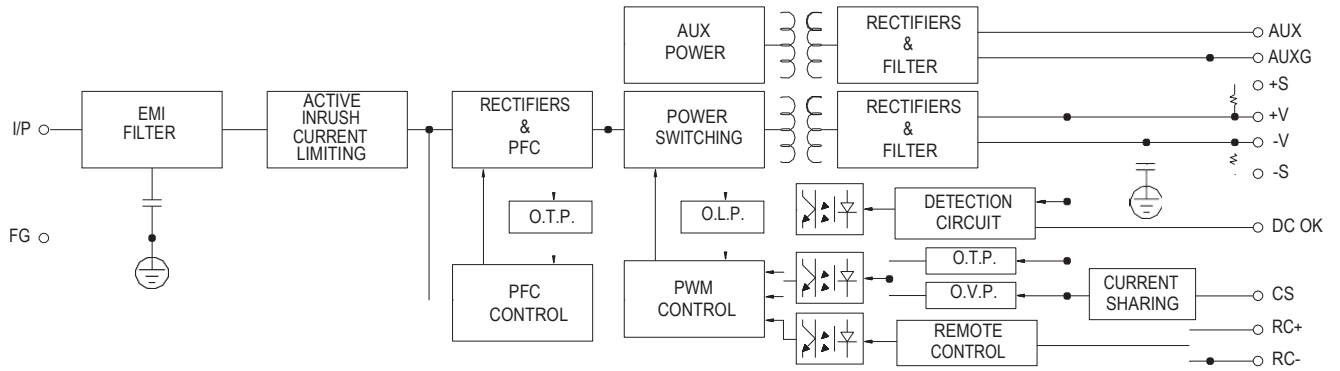
The MMP PS-1000W-12V is a single output enclosed type AC/DC power supply providing 1000 W output power for a wide range of industrial applications. This series operates for 90-264 VAC input voltage and offers models with different rated voltage ranging between 12 and 48 V that can satisfy the demands for all kinds of industrial equipment. Each model is cooled by the built-in fan with speed control, working for the temperature up to 70°C. Moreover, The MMP PS1000W-48V has various built-in functions such as auxiliary power, remote sense and remote on-off control, offering vast design flexibility for industrial application.

**SPECIFICATION**

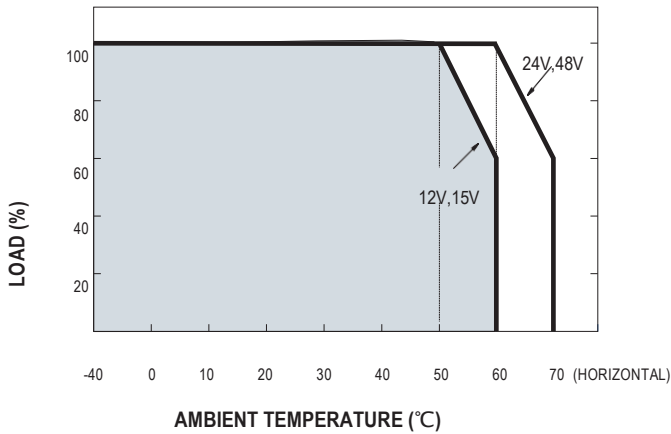
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                       |                                         |                          |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------|
| <b>MODEL</b>                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>MMP PS-1000W-48V</b>                                                                                                               |                                         |                          |
| <b>OUTPUT</b>                    | <b>DC VOLTAGE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 12V                                                                                                                                   |                                         |                          |
|                                  | <b>RATED CURRENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 80A                                                                                                                                   |                                         |                          |
|                                  | <b>CURRENT RANGE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0 ~ 80A                                                                                                                               |                                         |                          |
|                                  | <b>RATED POWER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 960W                                                                                                                                  |                                         |                          |
|                                  | <b>RIPPLE &amp; NOISE (max.) Note.2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 150mVp-p                                                                                                                              |                                         |                          |
|                                  | <b>VOLTAGE ADJ. RANGE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 11 ~ 14V                                                                                                                              |                                         |                          |
|                                  | <b>VOLTAGE TOLERANCE Note.3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ± 1.0%                                                                                                                                |                                         |                          |
|                                  | <b>LINE REGULATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ± 0.5%                                                                                                                                |                                         |                          |
|                                  | <b>LOAD REGULATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ± 0.5%                                                                                                                                |                                         |                          |
|                                  | <b>SETUP, RISE TIME</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1000ms, 50ms/230VAC      2000ms, 50ms/115VAC at full load                                                                             |                                         |                          |
| <b>HOLD UP TIME (Typ.)</b>       | 16ms/230VAC      16ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                       |                                         |                          |
| <b>INPUT</b>                     | <b>VOLTAGE RANGE Note.4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90 ~ 264VAC(300VAC for 5 sec.)      127 ~ 370VDC                                                                                      |                                         |                          |
|                                  | <b>FREQUENCY RANGE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 47 ~ 63Hz                                                                                                                             |                                         |                          |
|                                  | <b>POWER FACTOR (Typ.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PF>0.95/230VAC      PF>0.99/115VAC at full load                                                                                       |                                         |                          |
|                                  | <b>EFFICIENCY (Typ.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 91.5%                                                                                                                                 |                                         |                          |
|                                  | <b>AC CURRENT (Typ.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 8.5A/115VAC      5A/230VAC                                                                                                            |                                         |                          |
|                                  | <b>INRUSH CURRENT (Typ.)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 25A/115VAC      40A/230VAC                                                                                                            |                                         |                          |
|                                  | <b>LEAKAGE CURRENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <1.2mA / 240VAC                                                                                                                       |                                         |                          |
| <b>PROTECTION</b>                | <b>OVERLOAD</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 105 ~ 135% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed |                                         |                          |
|                                  | <b>OVER VOLTAGE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 14.5 ~ 16.5V<br>Protection type : Shut down o/p voltage, re-power on to recover                                                       |                                         |                          |
|                                  | <b>OVER TEMPERATURE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Shut down o/p voltage, recovers automatically after temperature goes down                                                             |                                         |                          |
| <b>FUNCTION</b>                  | <b>CURRENT SHARING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Up to 4000W or (3+1) units. Please refer to the Function Manual.                                                                      |                                         |                          |
|                                  | <b>REMOTE ON-OFF CONTROL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Power ON : short; Power OFF : open. Please refer to the Function Manual.                                                              |                                         |                          |
|                                  | <b>REMOTE SENSE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Compensate voltage drop on the load wiring up to 0.5V. Please refer to the Function Manual.                                           |                                         |                          |
|                                  | <b>DC-OK SIGNAL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The TTL signal out, PSU turn on = 3.3 ~ 5.6V ; PSU turn off = 0 ~ 1V. Please refer to the Function Manual.                            |                                         |                          |
|                                  | <b>5V STANDBY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 5VSB : 5V@0.3A ; tolerance ± 5%, ripple : 50mVp-p(max.)                                                                               |                                         |                          |
|                                  | <b>FAN CONTROL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Fan on/off by NTC(RT50) or 30% load min.                                                                                              |                                         |                          |
| <b>ENVIRONMENT</b>               | <b>WORKING TEMP.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | -40 ~ +70°C (Refer to "Derating Curve")                                                                                               |                                         |                          |
|                                  | <b>WORKING HUMIDITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 20 ~ 90% RH non-condensing                                                                                                            |                                         |                          |
|                                  | <b>STORAGE TEMP., HUMIDITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | -40 ~ +85°C, 10 ~ 95% RH non-condensing                                                                                               |                                         |                          |
|                                  | <b>TEMP. COEFFICIENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ± 0.03%/°C (0 ~ 50°C)                                                                                                                 |                                         |                          |
|                                  | <b>VIBRATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes                                                                          |                                         |                          |
| <b>SAFETY &amp; EMC (Note 7)</b> | <b>SAFETY STANDARDS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | UL62368-1, TUV EN62368-1, EAC TP TC 004 approved                                                                                      |                                         |                          |
|                                  | <b>WITHSTAND VOLTAGE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I/P-O/P:3KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC                                                                                       |                                         |                          |
|                                  | <b>ISOLATION RESISTANCE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                                                            |                                         |                          |
|                                  | <b>EMC EMISSION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Parameter</b>                                                                                                                      | <b>Standard</b>                         | <b>Test Level / Note</b> |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Conducted                                                                                                                             | EN55032 (CISPR32) / EN55011 (CISPR11)   | Class B                  |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Radiated                                                                                                                              | EN55032 (CISPR32) / EN55011 (CISPR11)   | Class A                  |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Harmonic Current                                                                                                                      | EN61000-3-2                             | Class A                  |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Voltage Flicker                                                                                                                       | EN61000-3-3                             | -----                    |
|                                  | <b>EMC IMMUNITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | EN55024, EN61000-6-2                                                                                                                  |                                         |                          |
|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Parameter</b>                                                                                                                      | <b>Standard</b>                         | <b>Test Level / Note</b> |
| ESD                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN61000-4-2                                                                                                                           | Level 3, 8KV air ; Level 2, 4KV contact |                          |
| Radiated                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN61000-4-3                                                                                                                           | Level 3                                 |                          |
| EFT / Burst                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN61000-4-4                                                                                                                           | Level 3                                 |                          |
| Surge                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN61000-4-5                                                                                                                           | Level 4, 2KV/Line-Line 4KV/Line-Earth   |                          |
| Conducted                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN61000-4-6                                                                                                                           | Level 3                                 |                          |
| Magnetic Field                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | EN61000-4-8                                                                                                                           | Level 4                                 |                          |
| Voltage Dips and Interruptions   | EN61000-4-11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods                                                              |                                         |                          |
| <b>OTHERS</b>                    | <b>MTBF</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 286.6K hrs min. Telcordia SR-332 (Bellcore) ; 105.8K hrs min. MIL-HDBK-217F (25°C)                                                    |                                         |                          |
|                                  | <b>DIMENSION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 218*105*63.5mm (L*W*H)                                                                                                                |                                         |                          |
|                                  | <b>PACKING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1.53Kg;8pcs/13.3Kg/1.34CUFT                                                                                                           |                                         |                          |
| <b>NOTE</b>                      | <ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> <li>Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.</li> <li>No load power consumption&lt;0.75W when RC+ &amp; RC- (CN100 pin3,4) open.</li> <li>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 360mm*700mm 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."</li> <li>The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</li> </ol> |                                                                                                                                       |                                         |                          |

**Block Diagram**

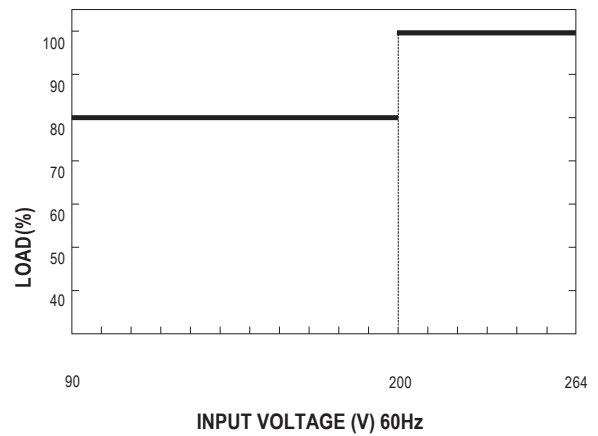
PFC : 65KHz  
PWM : 90KHz



**Derating Curve**



**Output Derating VS Input Voltage**



**Function Description of CN100**

| Pin No. | Function | Description                                                                                                                                                                                                           |
|---------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | AUXG     | Auxiliary voltage output ground.                                                                                                                                                                                      |
| 2       | AUX      | Auxiliary voltage output, 4.75~5.25V, referenced to pin 1(AUXG). The maximum load current is 0.3A. This output is not controlled by the "remote ON/OFF control".                                                      |
| 3       | RC+      | Turns the output on and off by electrical or dry contact between pin 4 (RC-), Short: Power ON, Open: Power OFF.                                                                                                       |
| 4       | RC-      | Remote control ground.                                                                                                                                                                                                |
| 5       | CS       | Current sharing signal. When units are connected in parallel, the CS pins of the units should be connected to allow current balance between units.                                                                    |
| 6,8     | GND      | This pin connects to the negative terminal(-V). Return for DC-OK signal output.                                                                                                                                       |
| 7       | DC-OK    | DC-OK signal is a TTL level signal, referenced to pin8(DC-OK GND). High when PSU turns on.                                                                                                                            |
| 9       | +S       | Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V. |
| 10      | -S       | Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V. |

**Function Manual**
**1. Remote Sense**

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

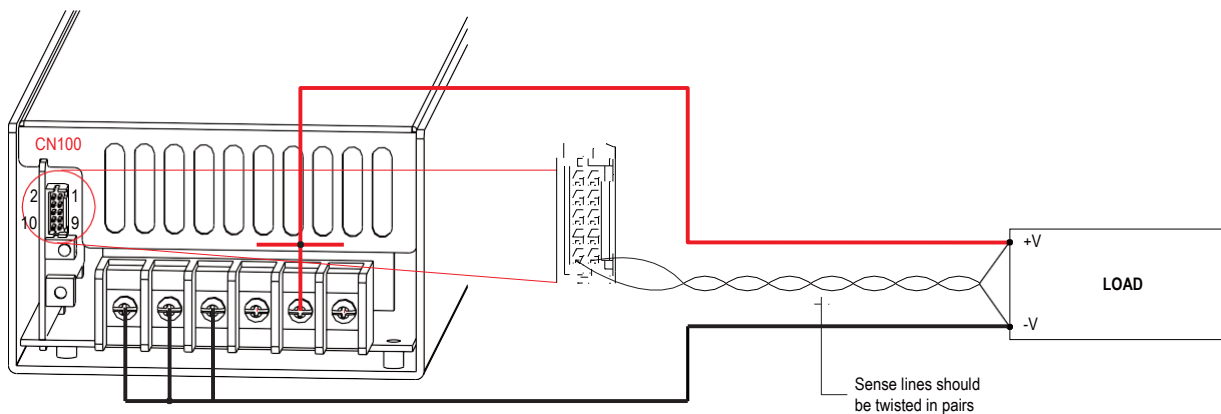


Fig 1.1

**2. DC-OK Signal**

DC-OK signal is a TTL level signal. High when PSU turns on.

| Between DC-OK(pin7) and GND(pin6,8) | Output Status |
|-------------------------------------|---------------|
| 3.3 ~ 5.6V                          | ON            |
| 0 ~ 1V                              | OFF           |

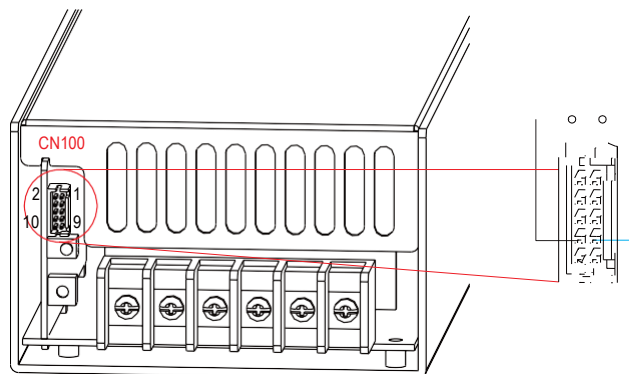


Fig 2.1

### 3. Remote ON-OFF Control

The PSU can be turned ON/OFF by using the "Remote Control" function.

| Between RC+(pin3) and RC-(pin4) | Output Status |
|---------------------------------|---------------|
| SW ON (Short)                   | ON            |
| SW OFF (Open)                   | OFF           |

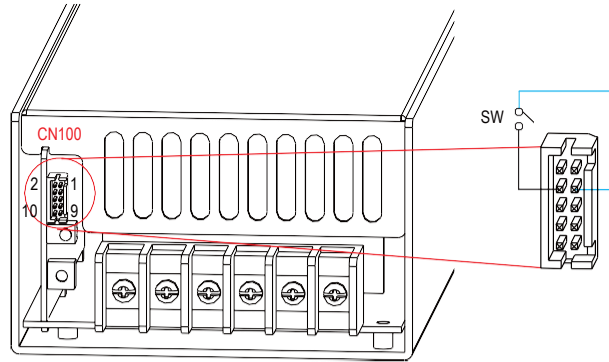


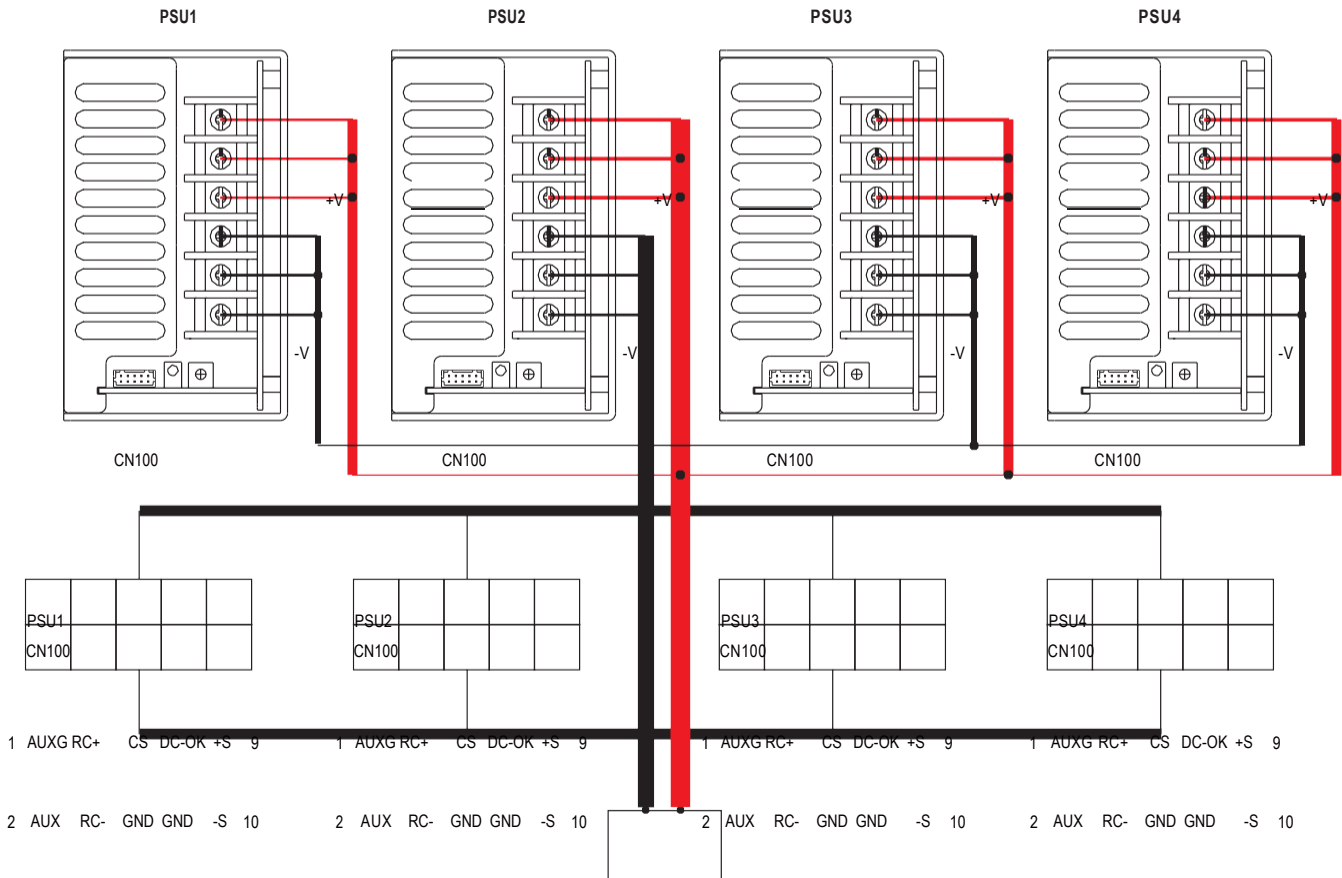
Fig 3.1

### 4. Current Sharing

The MMP PS-1000W-12V 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:  

$$\text{Maximum output current at parallel operation} = (\text{Rated current per unit}) \times (\text{Number of unit}) \times 0.9$$
- ※ When the total output current is less than 5% of the total rated current, or say (5% of Rated current per unit)  $\times$  (Number of unit) the current shared among units may not be fully balanced.



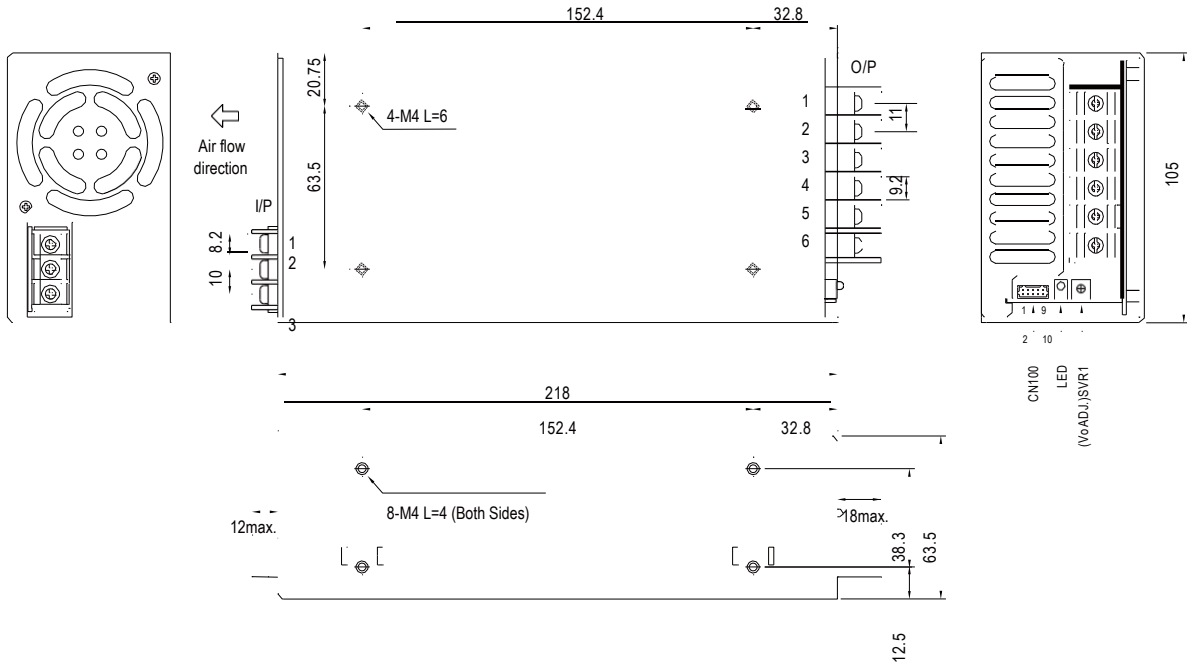
-V +V  
LOAD



Fig 4.1

**Mechanical Specification**

Case No. 977 Unit:mm



AC Input Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1       | AC/L       |
| 2       | AC/N       |
| 3       | FG         |

DC Output Terminal Pin No. Assignment

| Pin No. | Assignment |
|---------|------------|
| 1~3     | +V         |
| 4~6     | -V         |

Connector Pin No. Assignment(CN100) : HRS DF11-10DP-2DS or equivalent

| Pin No. | Assignment | Pin No. | Assignment | Mating Housing              | Terminal                     |
|---------|------------|---------|------------|-----------------------------|------------------------------|
| 1       | AUXG       | 6,8     | GND        | HRS DF11-10DS or equivalent | HRS DF11-**-SC or equivalent |
| 2       | AUX        | 7       | DC-OK      |                             |                              |
| 3       | RC+        | 9       | +S         |                             |                              |
| 4       | RC-        | 10      | -S         |                             |                              |
| 5       | CS         |         |            |                             |                              |

**Installation Manual**

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