



| Dimension | | | |
|-----------|------|----------|------|
| L | W | H | |
| 300 | 85 | 41 (1U) | mm |
| 11.8 | 3.35 | 1.61(1U) | inch |



■ Features

- Universal AC input / Full range
(Withstand 300VAC surge input for 5 seconds)
- Built-in active PFC function
- High efficiency up to 93%
- Forced air cooling by built-in DC fan
- Output voltage and constant current level programmable
- Active current sharing up to 9600W (5+1)
- Built-in remote ON-OFF control / remote sense / auxiliary power / DC OK signal / OTP alarm signal
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Optional PMBus or CANBus protocol
- 5 years warranty

■ Certificates

- Safety: UL/EN/IEC 60950-1
- EMC: EN 55032 / 55024

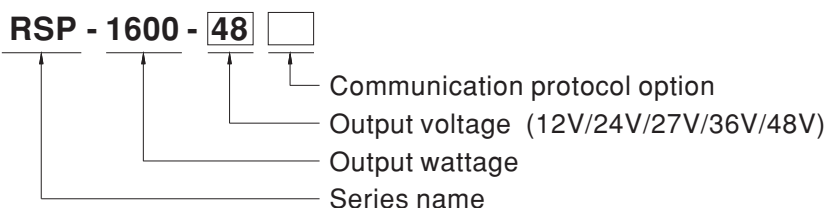
■ Applications

- Factory control or automation apparatus
- Test and measurement instrument
- Laser related machine
- Aging facility
- Digital broadcasting
- Constant current source
- Redundant system

■ Description

RSP-1600 is a 1.6KW single output enclosed type AC/DC power supply with a 1U low profile and a high power density up to 25W/inch³. This series operates for 90~264VAC input voltage and offers the models with the DC output mostly demanded from the industry. Each model is cooled by the thermostatically controlled fan. Moreover, RSP-1600 provides vast design flexibility by equipping various built-in functions such as the output programming, active current sharing, remote ON-OFF control, auxiliary power, etc.

■ Model Encoding / Order Information



| Type | Communication Protocol | Note |
|-------|------------------------|------------|
| Blank | None | In Stock |
| PM | PMBus protocol | By request |
| CAN | CANBus protocol | By request |

SPECIFICATION

| MODEL | RSP-1600-12 | RSP-1600-24 | RSP-1600-27 | RSP-1600-36 | RSP-1600-48 | |
|--------------------------------|--|--|--|---|-------------------|--------------|
| OUTPUT | DC VOLTAGE | 12V | 24V | 27V | 36V | 48V |
| | RATED CURRENT | 125A | 67A | 59A | 44.5A | 33.5A |
| | CURRENT RANGE | 0 ~ 125A | 0 ~ 67A | 0 ~ 59A | 0 ~ 44.5A | 0 ~ 33.5A |
| | RATED POWER | 1500W | 1608W | 1593W | 1602W | 1608W |
| | RIPPLE & NOISE (max.) Note.2 | 150mVp-p | 200mVp-p | 200mVp-p | 250mVp-p | 300mVp-p |
| | VOLTAGE ADJ. RANGE | 11.5 ~ 15V | 23.5 ~ 30V | 26.5 ~ 33.5V | 35.5 ~ 45V | 47.5 ~ 58.8V |
| | VOLTAGE TOLERANCE Note.4 | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | SETUP, RISE TIME | 1500ms, 60ms/230VAC at full load | | | | |
| HOLD UP TIME (Typ.) | 16ms / 230VAC at 75% load 10ms / 230VAC at full load | | | | | |
| INPUT | VOLTAGE RANGE Note.5 | 90 ~ 264VAC 127 ~ 370VDC | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | |
| | POWER FACTOR (Typ.) | 0.97/230VAC at full load | | | | |
| | EFFICIENCY (Typ.) | 89% | 91.5% | 92% | 92% | 93% |
| | AC CURRENT (Typ.) Note.5 | 14A/115VAC 8A/230VAC | 15A/115VAC 8.5A/230VAC | | | |
| | INRUSH CURRENT (Typ.) | COLD START 35A/230VAC | | | | |
| | LEAKAGE CURRENT | <2mA / 230VAC | | | | |
| PROTECTION | OVERLOAD | 105 ~ 115% rated output power Protection type : Constant current limiting, unit will shut down o/p voltage after 5 sec. re-power on to recover | | | | |
| | OVER VOLTAGE | 15.75 ~ 18.75V | 31.5 ~ 37.5V | 35.2 ~ 41.9V | 47.2 ~ 56.3V | 63 ~ 75V |
| | OVER TEMPERATURE | Protection type : Shut down o/p voltage, re-power on to recover Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | | | | |
| FUNCTION | OUTPUT VOLTAGE PROGRAMMABLE(PV) Note 6 | Adjustment of output voltage is allowable to 40 ~ 125% of nominal output voltage (60 ~ 125% for 12V). Please refer to the Function Manual. | | | | |
| | OUTPUT CURRENT PROGRAMMABLE(PC) Note 6 | Adjustment of constant current level is allowable to 20 ~ 100% of rated current. Please refer to the Function Manual. | | | | |
| | AUXILIARY POWER | 5V @ 0.3A, 12V @ 0.8A | | | | |
| | REMOTE ON-OFF CONTROL | By electrical signal or dry contact Power ON:short Power OFF:open. Please refer to the Function Manual | | | | |
| | REMOTE SENSE | Compensate voltage drop on the load wiring up to 0.5V. Please refer to the Function Manual | | | | |
| ENVIRONMENT | ALARM SIGNAL | Isolated signal output for T-alarm and DC OK | | | | |
| | WORKING TEMP. | -30 ~ +70°C (Refer to "Derating Curve") | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C, 10 ~ 95% RH non-condensing | | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0 ~ 50°C) | | | | |
| SAFETY & EMC (Note 7) | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | |
| | SAFETY STANDARDS | UL60950-1, TUV EN60950-1, EAC TP TC 004, BSMI CNS14336-1 approved | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:1.5KVAC | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | |
| | EMC EMISSION | Parameter | Standard | | Test Level / Note | |
| | | 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 | | ----- | |
| | EMC IMMUNITY | EN55024 , EN61204-3, EN61000-6-2, BSMI CNS13438 | | | | |
| Parameter | | Standard | | Test Level / Note | | |
| 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 | | | |
| OTHERS | MTBF | 160.9K hrs min. Telcordia SR-332 (Bellcore) ; 42.1K hrs min. MIL-HDBK-217F (25°C) | | | | |
| | DIMENSION | 300*85*41mm (L*W*H) | | | | |
| | PACKING | 2.1Kg;6pcs/13.6Kg/1.03CUFT | | | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.</p> <p>3. Under parallel operation ripple of the output voltage may be higher than the SPEC at light load condition. It will go back to normal ripple level once the output load is more than 5%.</p> <p>4. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>5. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>6. PV/PC functions when users are not operating on PMBus/CANBus. SVR functions when users are neither operating on PMBus/CANBus nor using PV/PC.</p> <p>7. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 720mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)</p> <p>8. 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).</p> | | | | | |