



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

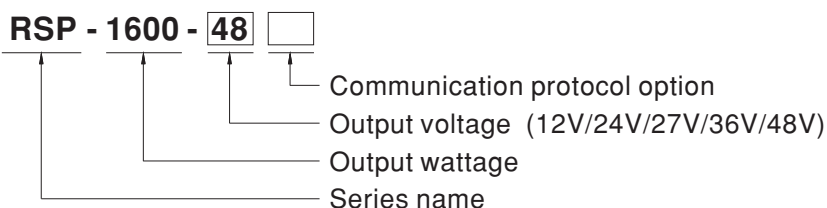
## ■ Applications

- 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/inch<sup>3</sup>. 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 &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</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>					