

**Professionally approved products.**

## **Datasheet**

**Embedded Linear Power Supply Encapsulated,  
120 → 370 V dc, 85 → 264 V ac Input, 27.6V dc  
Output, 1.8A**

**RS Stock number 740-5008**



### ■ Features :

- Universal AC input/Full range
- Protections: Short circuit / Overload / Over voltage / Battery polarity protections (by fuse)
- Cooling by free air convection
- LED indicator for power on
- No load power consumption <0.75W
- 100% full load burn-in test
- 2 years warranty

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MODEL		740-4995	740-5008
OUTPUT	DC VOLTAGE	13.8V	27.6V
	RATED CURRENT	3.6A	1.8A
	CURRENT RANGE	0 ~ 3.6A	0 ~ 1.8A
	PEAK 5S <small>Note.6</small>	4.3A	2.2A
	RATED POWER	49.7W	49.7W
	RIPPLE & NOISE (max.) <small>Note.2</small>	120mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	+15,-5%	+15,-5%
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%	±1.0%
	LINE REGULATION <small>Note.4</small>	±1.0%	±1.0%
	LOAD REGULATION <small>Note.5</small>	±2.0%	±1.0%
	SETUP, RISE TIME	500ms, 30ms/230VAC    1200ms, 30ms/115VAC at full load	
	HOLD UP TIME (Typ.)	50ms/230VAC    16ms/115VAC at full load	
INPUT	VOLTAGE RANGE	85 ~ 264VAC    120 ~ 370VDC	
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY(Typ.)	81%	85%
	AC CURRENT (Typ.)	1.1A/115VAC    0.65A/230VAC	
	INRUSH CURRENT (Typ.)	COLD START 45A	
	LEAKAGE CURRENT	<2mA / 240VAC	
FUNCTION	TEMP. COMPENSATION	By NTC (not provide with the power supply)	
	OUTPUT VOLTAGE SENSOR	L=output voltage <sub>o</sub> <sup>+0.7</sup> V	
PROTECTION	OVERLOAD	4.3 ~ 5.8A rated output power	2.2 ~ 2.9A rated output power
		Protection type: Hiccup mode, recovers automatically after fault condition is removed	
	OVER VOLTAGE	16.6 ~ 19.3V	33.1 ~ 38.5V
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to output load derating curve)	
	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH	
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 45°C)	
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
SAFETY & EMC <small>(Note 7)</small>	SAFETY STANDARDS	UL60950-1, CB(IEC60950-1) approved	
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC	
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH	
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B	
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3	
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, EN61000-6-1, light industry level, criteria A	
OTHERS	MTBF	495.7K hrs min.    MIL-HDBK-217F (25°C)	
	DIMENSION	129*98*38mm (L*W*H)	
	PACKING	0.45Kg; 30pcs/14.5Kg/0.95CUFT	



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### ■ Function Description

#### 1.B+,B-

Connect the battery : B+ connected to battery positive.  
B- connected to battery negative.

#### 2.L

Output voltage detection, detection output voltage or battery voltage ( if battery is used).  
L=output voltage  $+0.7V$ .

#### 3.+V,-V

Output voltage . Can't connect the battery.

#### 4.CN2

Temperature sensor can be connected to the unit to allow temperature compensation of the charging voltage.  
If the sensor is not used, the charger still works normally.

Reference example:

Connect 100K  $\Omega$  Thermistor(THINKING) on NTC. Adjust VR to cause the output voltage is normally voltage. The output voltage will change along with the temperature change.

	Ta :0℃	Ta :25℃	Ta :50℃
SCP-50-12	14.4 $\pm$ 0.2V	13.8 $\pm$ 0.1V	13.2 $\pm$ 0.2V
SCP-50-24	29.3 $\pm$ 0.4V	27.6 $\pm$ 0.2V	26.4 $\pm$ 0.4V

