



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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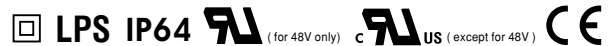




### ■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage
- Cooling by free air convection
- Built-in constant current limiting circuit with adjustable OCP level
- Optional dimming function : 1.1~10VDC (D type) or PWM (P type) controlled
- Fully isolated plastic case with IP64 level
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED lighting and moving sign applications (Note.8)
- 100% full load burn-in test
- Low cost
- 2 years warranty

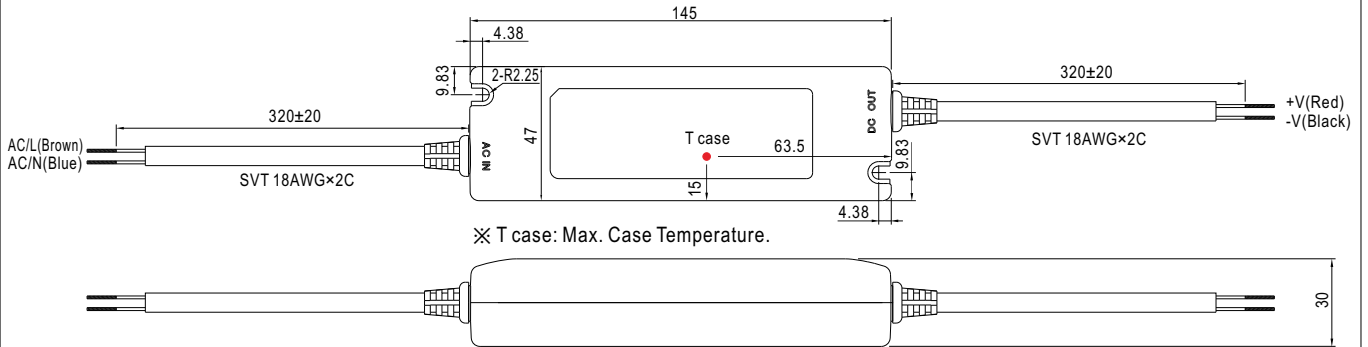
### SPECIFICATION



MODEL		ELN-30-5	ELN-30-9	ELN-30-12	ELN-30-15	ELN-30-24	ELN-30-27	ELN-30-48			
OUTPUT	DC VOLTAGE	5V	9V	12V	15V	24V	27V	48V			
	LED OPERATION VOLTAGE Note.7	3 ~ 5V	3 ~ 9V	3 ~ 12V	3 ~ 15V	3 ~ 24V	3 ~ 27V	3 ~ 48V			
	RATED CURRENT	5A	3.4A	2.5A	2A	1.25A	1.12A	0.63A			
	CURRENT RANGE	0 ~ 5A	0 ~ 3.4A	0 ~ 2.5A	0 ~ 2A	0 ~ 1.25A	0 ~ 1.12A	0 ~ 0.63A			
	RATED POWER	25W	30.6W	30W	30W	30W	30.24W	30.24W			
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p	250mVp-p			
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5V	8.7 ~ 10.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	24.3 ~ 29.7V	43.2 ~ 52.8V			
	Can be adjusted by internal potentiometer SVR1										
	CURRENT ADJ. RANGE	-25% ~ 3%. Can be adjusted by internal potentiometer SVR2									
	VOLTAGE TOLERANCE Note.3	±5.0%									
	LINE REGULATION	±1.0%									
	LOAD REGULATION	±2.0%									
SETUP, RISE TIME Note.6	500ms, 80ms / 230VAC 1000ms, 80ms / 115VAC at full load										
HOLD UP TIME (Typ.)	50ms/230VAC 16ms/115VAC at full load										
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC		127 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	75%	80%	82%	82%	85%	85%	87%			
	AC CURRENT (Typ.)	0.75A/115VAC		0.48A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 55A(twidth=465µs measured at 50% Ipeak) at 230VAC									
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 8 units (circuit breaker of type C) at 230VAC									
LEAKAGE CURRENT	0.25mA / 240VAC										
PROTECTION	OVER CURRENT	95 ~ 110%									
	Protection type : Constant current limiting, recovers automatically after fault condition is removed										
OVER VOLTAGE	5.75 ~ 6.75V		11 ~ 13.5V		13.8 ~ 16V		17.5 ~ 21V		28 ~ 32V	31 ~ 36.4V	54 ~ 60V
	Protection type : Shut down o/p voltage, re-power on to recover										
FUNCTION	DIMMING CONTROL (OPTIONAL)	1.1 ~ 10VDC or PWM signal : 100Hz ~ 3KHz									
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)									
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes										
SAFETY & EMC	SAFETY STANDARDS	UL1310, CAN/CSA C22.2 No. 223-M91(except for 48V), IP64 approved ; design refer to TUV EN60950-1									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC									
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH									
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2 Class A, EN61000-3-3									
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A									
OTHERS	MTBF	628.3Khrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	145*47*30mm (L*W*H)									
	PACKING	0.26Kg; 60pcs/16.6Kg/1.25CUFT									
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>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.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.</li> <li>5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.</li> <li>6. 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>7. Constant current operation region is within the specified output voltage range above. This is the suitable operation region for LED related applications.</li> <li>8. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.</li> </ol>										

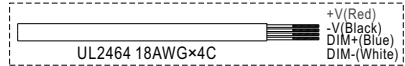
**Mechanical Specification**

Case No.964A Unit:mm

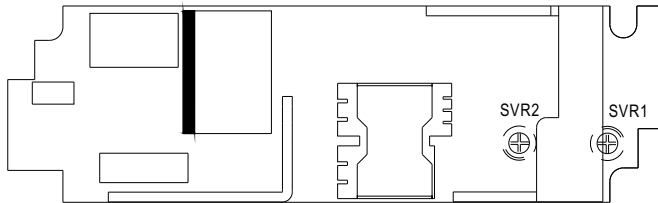


※ T case: Max. Case Temperature.

OUTPUT(with optional dimming function)

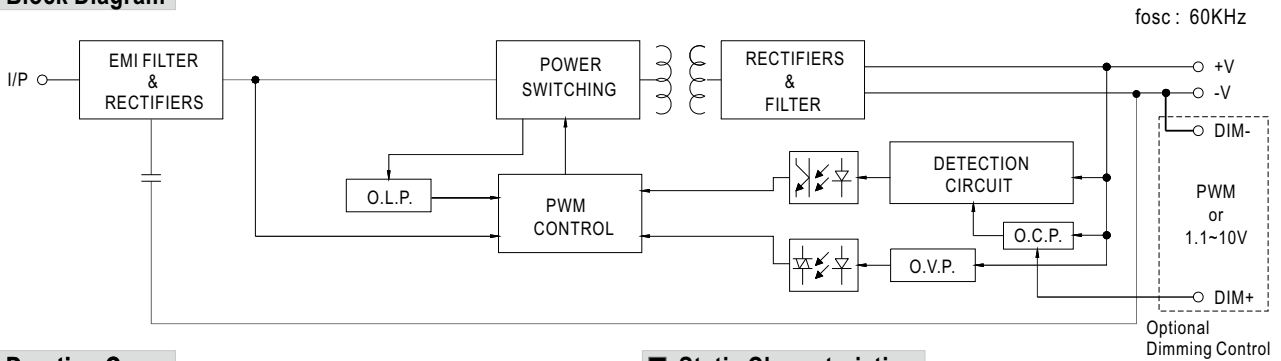


Output voltage and current adjustment : remove the upper case and adjust through SVR1 & SVR2 shown in the diagram.

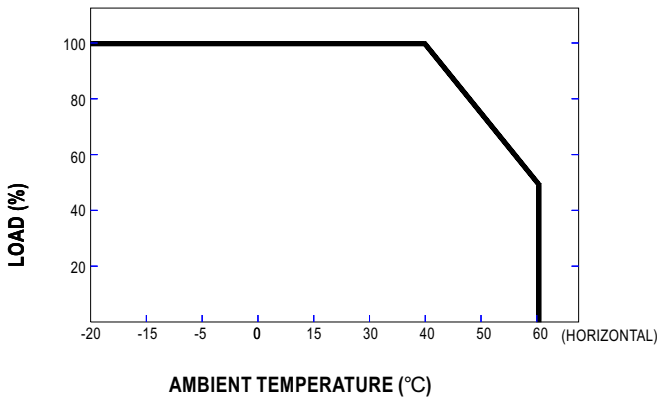


SVR1	Output voltage adjustment
SVR2	Output current adjustment

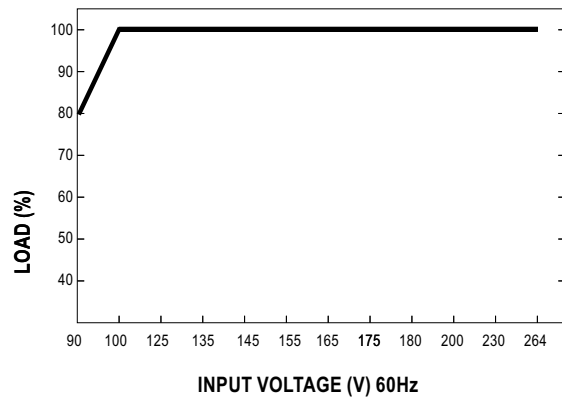
**Block Diagram**



**Derating Curve**



**Static Characteristics**



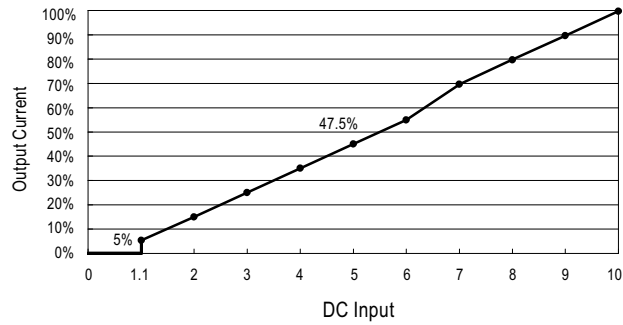
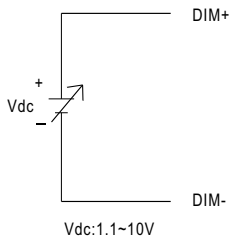


■ Dimming Control (Optional)

Level of output current can be adjusted through the dimming control function.

When there is no signal sending to the control wires (open circuit between the two control wires), the power supply unit will operate as 0V (D-type) or 0% duty (P-type) of input signal and hence the output current will be zero.

(1) 1.1~10V (D type, & : ELN-30-12D)



(2) PWM (P type, & : ELN-30-12P)

