



## 9~18W AC-DC Single Output Wall-mounted type

## ES18U series



## ■ Features :

- Universal AC input / Full range
- 2 pole USA plug
- Class II power (without earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- RCC control circuit and regulated
- LED indicator for power on
- Approvals: UL/ CUL / CB / FCC
- 1 year warranty

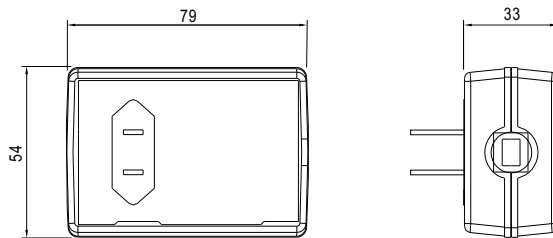
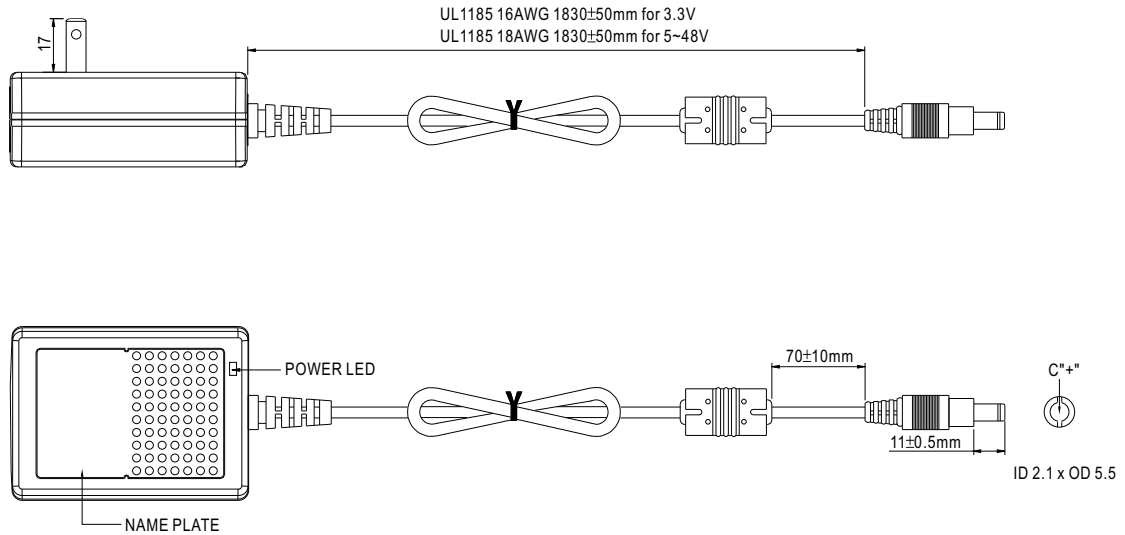


## SPECIFICATION

ORDER NO.		ES18U03-P1J	ES18U05-P1J	ES18U07-P1J	ES18U09-P1J	ES18U12-P1J	ES18U15-P1J	ES18U18-P1J	ES18U24-P1J	ES18U28-P1J	ES18U48-P1J
OUTPUT	SAFETY MODEL NO.	ES18U03	ES18U05	ES18U07	ES18U09	ES18U12	ES18U15	ES18U18	ES18U24	ES18U28	ES18U48
	DC VOLTAGE                      Note.2	3.3V	5V	7.5V	9V	12V	15V	18V	24V	28V	48V
	RATED CURRENT	2.72A	3.0A	2.0A	2.0A	1.50A	1.20A	1.0A	0.75A	0.64A	0.375A
	CURRENT RANGE	0.3 ~ 2.72A	0.3 ~ 3.0A	0.3 ~ 2.0A	0.2 ~ 2.0A	0.15 ~ 1.50A	0.1 ~ 1.20A	0.1 ~ 1.0A	0.1 ~ 0.75A	0.06 ~ 0.64A	0.05 ~ 0.375A
	RATED POWER (max.)	9W	15W	15W	18W	18W	18W	18W	18W	18W	18W
	RIPPLE & NOISE (max.)    Note.3	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	Fixed									
	VOLTAGE TOLERANCE    Note.4	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION        Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION        Note.6	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%
SETUP, RISE, HOLD TIME		300ms, 100ms, 16ms at full load									
INPUT	VOLTAGE RANGE	90 ~ 264VAC    135 ~ 370VDC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	55%	70%	72%	72%	74%	77%	78%	80%	81%	82%
	AC CURRENT	0.5A / 100VAC									
	INRUSH CURRENT (max.)	20A / 115VAC									
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC									
PROTECTION	OVERLOAD	110 ~ 200% rated output power					130 ~ 350% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	105 ~ 135% rated output voltage					Protection type : Clamp by zener diode, output short				
ENVIRONMENT	WORKING TEMP.	0 ~ +50℃ (Refer to output load derating curve)									
	WORKING HUMIDITY	20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50℃)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	UL60950-1, CSA C22.2 approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH									
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B									
	HARMONIC CURRENT	Compliance to EN61000-3-2,3									
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A									
	MTBF	500Khrs min. MIL-HDBK-217F(25℃)									
	DIMENSION	79*54*33mm (L*W*H)									
CONNECTOR	PACKING	220g ; 60pcs / 13.5kg / CARTON									
	PLUG	Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested									
	CABLE	Standard type UL1185 6ft (with ferrite core) for stock ; Other type available by customer requested									
NOTE	1.All parameters are specified at 115VAC input, rated load, 25℃ 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 20% to 100% rated load 7.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives.										

## Mechanical Specification

Unit:mm

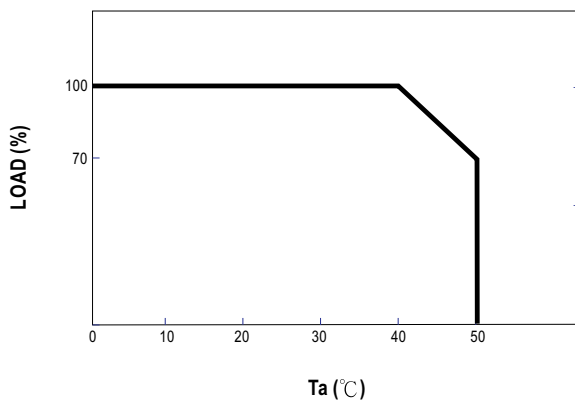


## Plug Assignment

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

## Derating Curve



## Static Characteristics

