

ESS1048 iPOP

High Power Constant Current
LED Driver | 48 Watts Max.

PRODUCT FEATURE

- Universal Input range from 110VAC~304VAC, 50/60Hz
- Stud-mount and Tab-mount design maximize design flexibility
- Size: 4.25" (L) x 3.00" (W) x 1.18" (H)
- Suitable for dry and damp location applications
- Standard 1-10V dimming; compatible with fluorescent dimmers
- Intelligent Window® GUI interface for programming
- Output current and voltage programmable maximize performance



SPECIFICATIONS

INPUT RANGE:	100 ~ 264VAC; 277VAC
POWER FACTOR:	> 0.92 at full load, 115VAC or 230VAC
INPUT CURRENT:	0.6 Amps max at 115VAC
OUTPUT CURRENT REGULATION:	±5%
PROTECTION:	OCP, SCP, OLP - Auto Recovery
DIMMING METHOD:	0-10V dimmer/ Fluorescent dimmer
HOLD UP TIME:	Half cycle min. at 120VAC and 80% rated load
FREQUENCY:	47 to 63Hz
INRUSH CURRENT:	50.0 Amps max. at 230VAC, cold start 25°C
EFFICIENCY:	83% Typical full load
MAXIMUM POWER:	48W
LEAKAGE CURRENT:	300uA typ.
DIMENSION:	108mm x 76mm x 30mm (LxWxH)
REGULATION COMPLIANCE:	UL8750 or EN61347, EN55015, EN61547

WARRANTY

- See [Limited Warranty Policy](#) for more additional information

ENVIRONMENTAL

OPERATING TEMPERATURE:	-30 to +50°C, Tc: 80°C
STORAGE TEMPERATURE:	-40 to +85°C
HUMIDITY (Non-Condensing):	5% to 95%
COOLING:	Convection
VIBRATION FREQUENCY:	5 to 50Hz
MTBF:	>100,000 hours at full load and 25°C ambient conditions (MIL-217F)

MODEL SELECTION

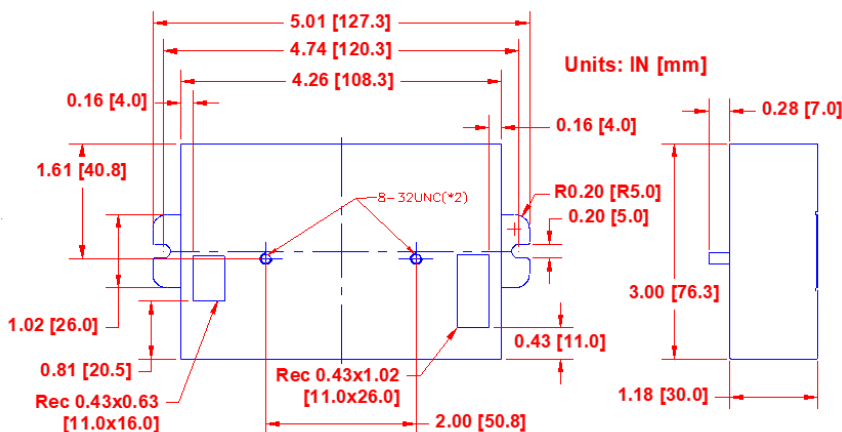
MODEL	OUTPUT CHARACTERISTICS				
	DIMMING	DIMMING RANGE	OUTPUT RANGE (mA)	V RANGE (DC)	MAX. WATTS
ESS1048-24-C1400 iPOP®	1 – 10V	8 – 100%	2500 – 1000	14 – 15	48
ESS1048-36-C1000 iPOP®	1 – 10V	8 – 100%	16660 – 675	24 – 36	48
ESS1048-48-C0750 iPOP®	1 – 10V	8 – 100%	1200 – 500	30 – 50	48
ESS1048-72-C0500 iPOP®	1 – 10V	8 – 100%	830 – 350	40 – 72	48

MECHANICAL SPECIFICATION - ESS1025-XX-YYY

XXX : Maximum Forward Voltage (Vf)
YY : Constant Current Output (If)
AC : Input terminal block
DC : Outout terminal block
0-10V : Dimming control terminal block

Note1: The combination of output current and voltage cannot exceed maximum rated power.

Note2: It is recommended to keep a minimum of 65% of rated load to maintain electrical characteristics.

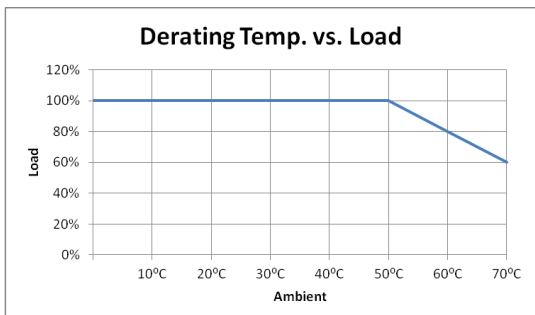


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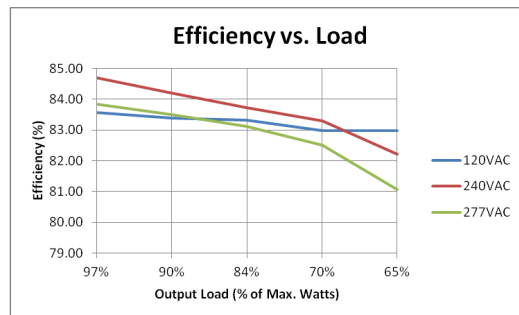
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Project Name:	
Type:	

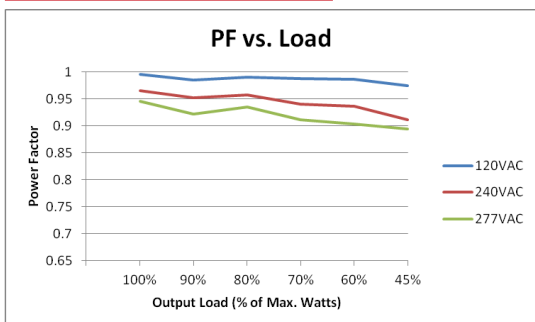
DE-RATING TEMP. VS LOAD



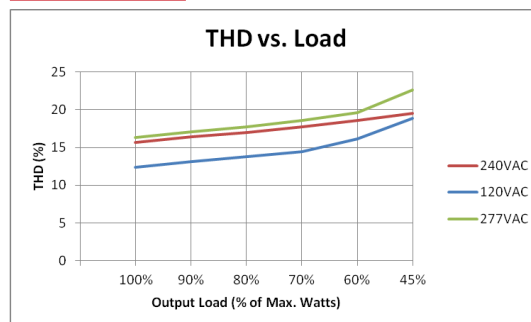
EFFICIENCY VS LOAD



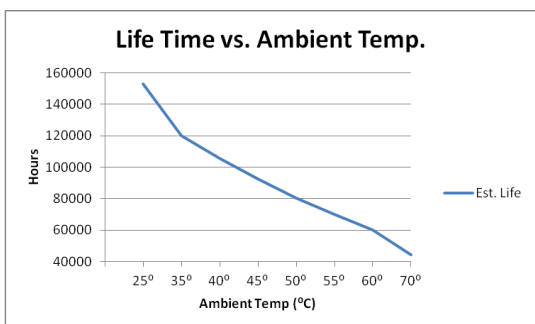
POWER FACTOR VS LOAD



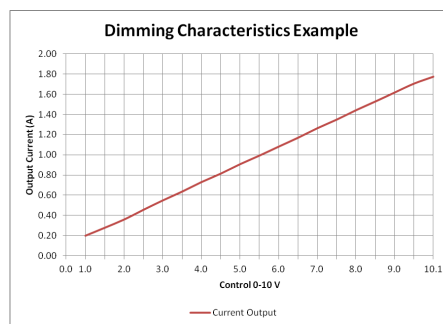
THD VS LOAD



LIFE TIME VS AMBIENT TEMP.



DIMMING CHARACTERISTICS



DIMMING WIRING DIAGRAM

For general operation and networking purposes where an OFF mode condition is required, our LED Driver dimming models (ESS & ESL) operate with 1-10V control input, where 1V input is minimum dim and less than 1V is OFF.

