

LUM-085S240MTF

Dimmable Constant Current LED Power Supply

Inventronics LUM Power Supply is the reliable choice for linear and area fixtures for office - industrial – shop – retail

Benefits

- 1% dimming capability with Dim to Off
- Programming via Inventronics PC programmer / Tuner4TRONIC
- Very low ripple for high lighting quality
- 12V Aux included
- Long lasting and high reliability
- UL Class 2

Applications

Linear and area lighting
Office – industrial – shop – retail

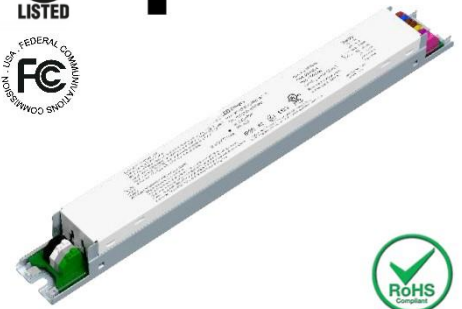
Approbations & Certifications

FCC / cULus / Class P

In preparation, if not already printed on the label



CLASS
P



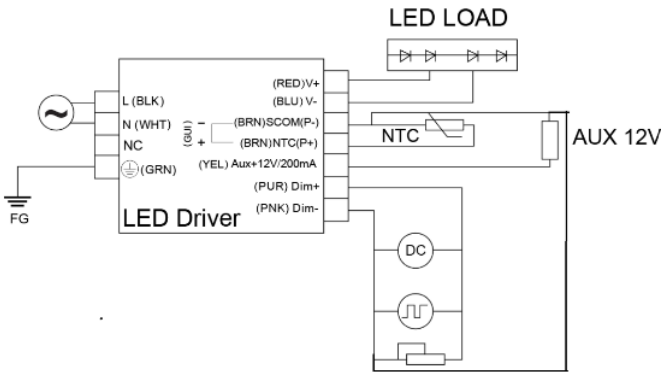
Size	Unit	Inch	Millimeter
Case Length		16.69	424.0
Case Width		1.18	30.0
Case Height		1.02	26.0
Mounting Length		16.45	418.0
Connectors		UL, KF250-3.5, 250-402 Push Pin or equivalent	

Product Features

- 1% dimming capability incl. Dim to Off
- 0-10V / PWM dimming
- Low THD $\leq 20\%$ @ full load
- Input voltage: 120 – 277V
- Very wide ambient temperature range
- Programmable drivers
- Low flicker index $< 5\%$
- 12Vaux included
- Long lifetime up to 100k hours
- 5 years warranty

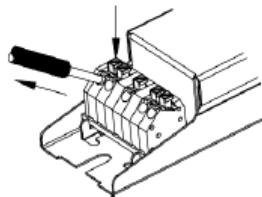
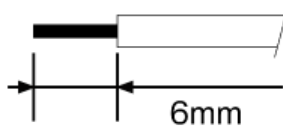
	Item	Value	Unit	Remarks	
INPUT	Nominal voltage	120 – 277	V		
	Nominal frequency	50 / 60	Hz	Max 47 – 63Hz	
	AC voltage range	108 – 305	V		
	Input current AC	0.9/0.40	mA	120, 277V	
	Total Harmonic Distortion (THD)	≤ 20	%	120Vac / 277Vac output ≥ 50% load	
	Stand-by power	≤ 2.3	W	Dim to Off / no AUX	
	Power factor	≥ 0.9		120Vac / 277Vac output ≥ 50% load	
	Efficiency	Up to 91	%	Full load without AUX	
	Leakage current	300 / 750	µA	120Vac/277 Vac / 60Hz Input, Output Full Load	
OUTPUT	Inrush current max	41.2/97.5 typ	A	120Vac / 277Vac Typical / $t_{width} = 160 \mu s$ typical (max)	
	Nominal voltage range	10 - 55	V	59V max	
	Maximum voltage	60	Vdc	120V-277Vac / 60Hz Input	
	Nominal current range	700 – 2400	mA		
	Current accuracy	+/- 5	%	at 120-277Vac nominal voltage	
	Flicker index	< 5	%	Full load	
	Max. power	85	W		
	Start-Up Time	500	ms	120/277Vac / 60Hz Input, Output Full load	
	DIMMING	Dimming technology	0-10V / PWM		Linear & log dimming curve / PWM frequency: 200Hz – 2kHz
12V auxiliary output		10.8 / 12.0 / 13.2	V	Min./Typ./Max. – yellow wire	
12V auxiliary current		200	mA		
0-10V dimming		0 / 10 / 15	V	Min./Typ./Max. – purple wire	
Output source current		200	µA	Max. – purple Wire	
ENVIRONMENT	Dimming range	1-100%	%	1% dimming capability	
	Ambient temperature range t_a	-40 ... +55	°C		
	Maximum case temperature t_c	90	°C		
	Storage temperature range	-40 ... +85	°C		
	Relative humidity	5 ... 85	%	Not condensing	
	Surge transient protection	2 4	kV	L-N; L-FG & N-FG	
	Environmental rating	Indoor			
	IP rating	IP 20			
	Expected lifetime	50'000		h	$t_c = 85^\circ C$
		100'000			$t_c = 75^\circ C$

Wiring diagram



Installation / wiring

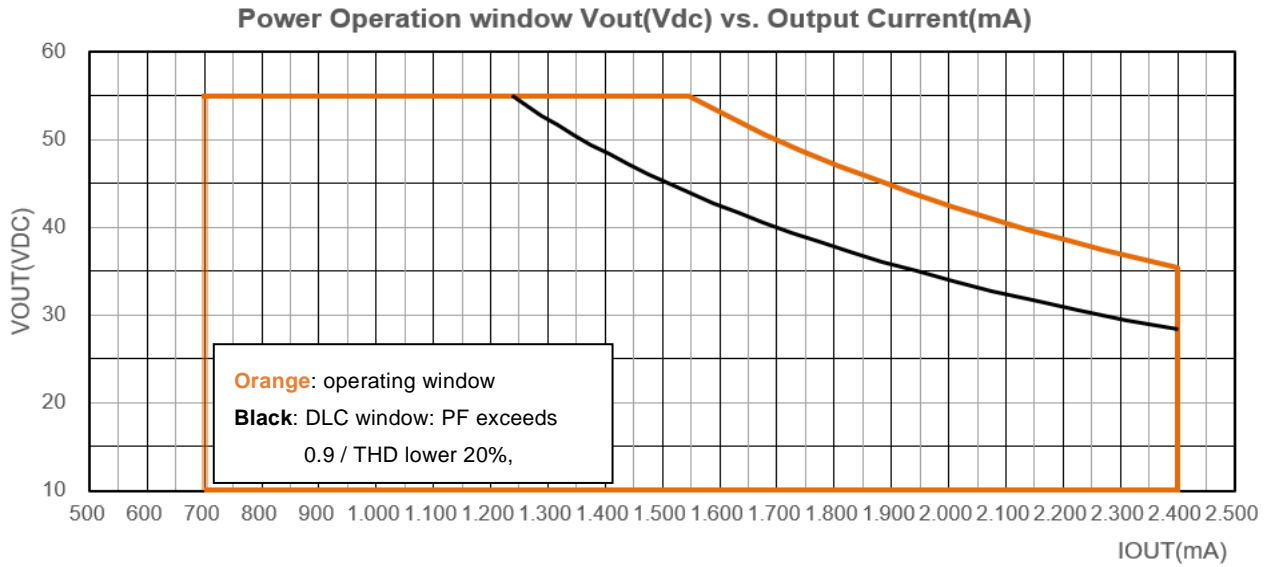
Wire preparation:
0.5-1.5mm²



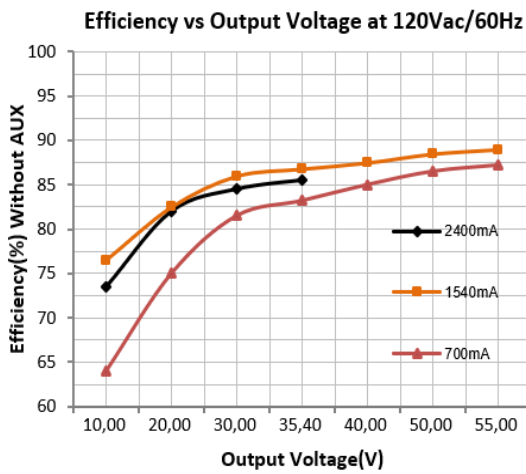
Only Solid wire with a cross section of 0.5 – 1.5 mm².

Strip 6mm of insulation from the cables to ensure perfect operation of terminals

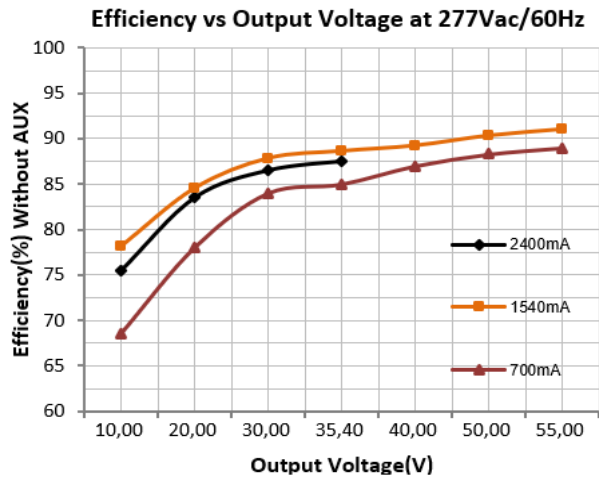
Operating window



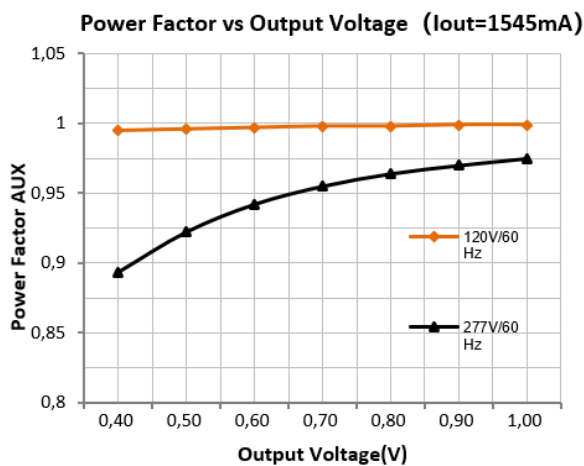
Efficiency vs output voltage 120Vac/60Hz



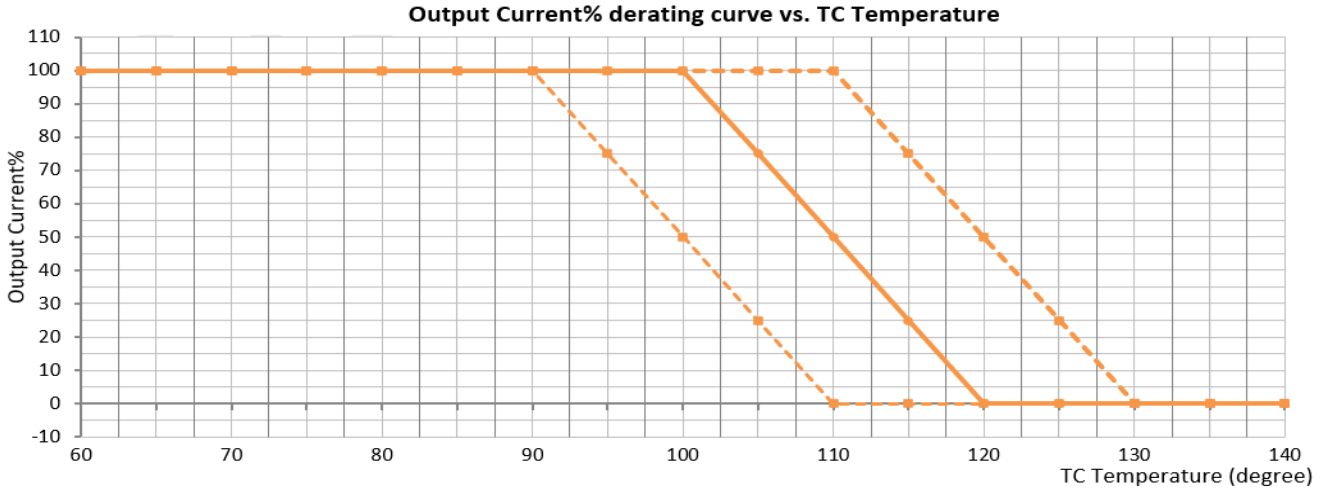
Efficiency vs output voltage 277Vac/60Hz



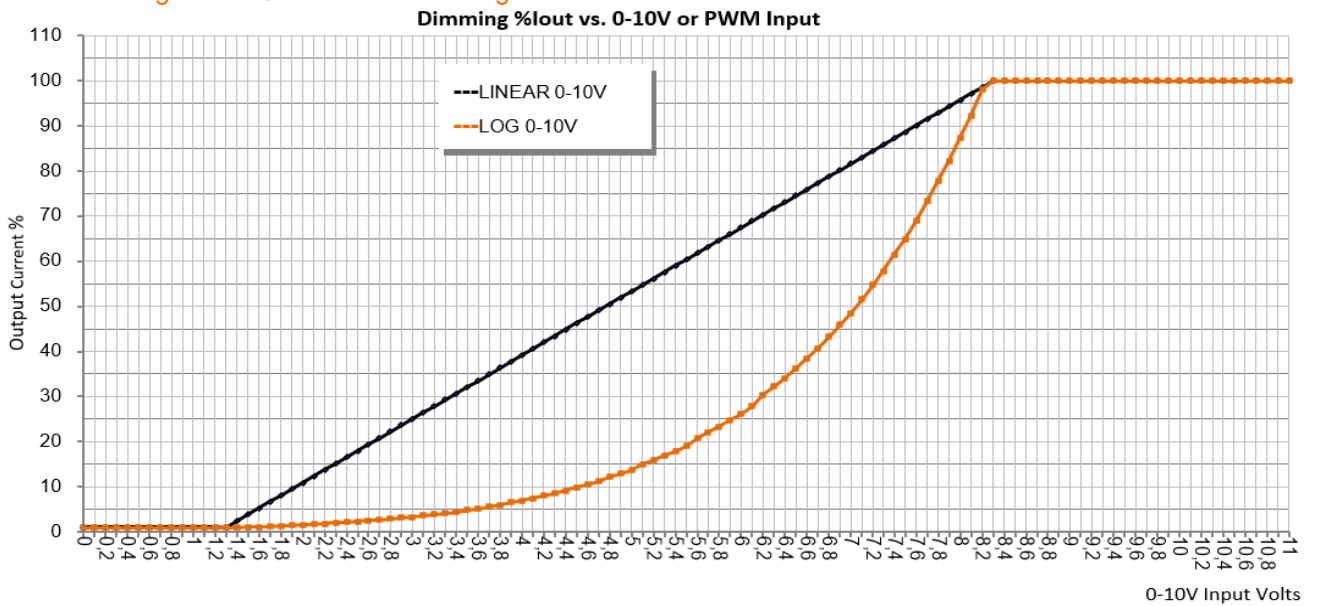
Power vs output voltage



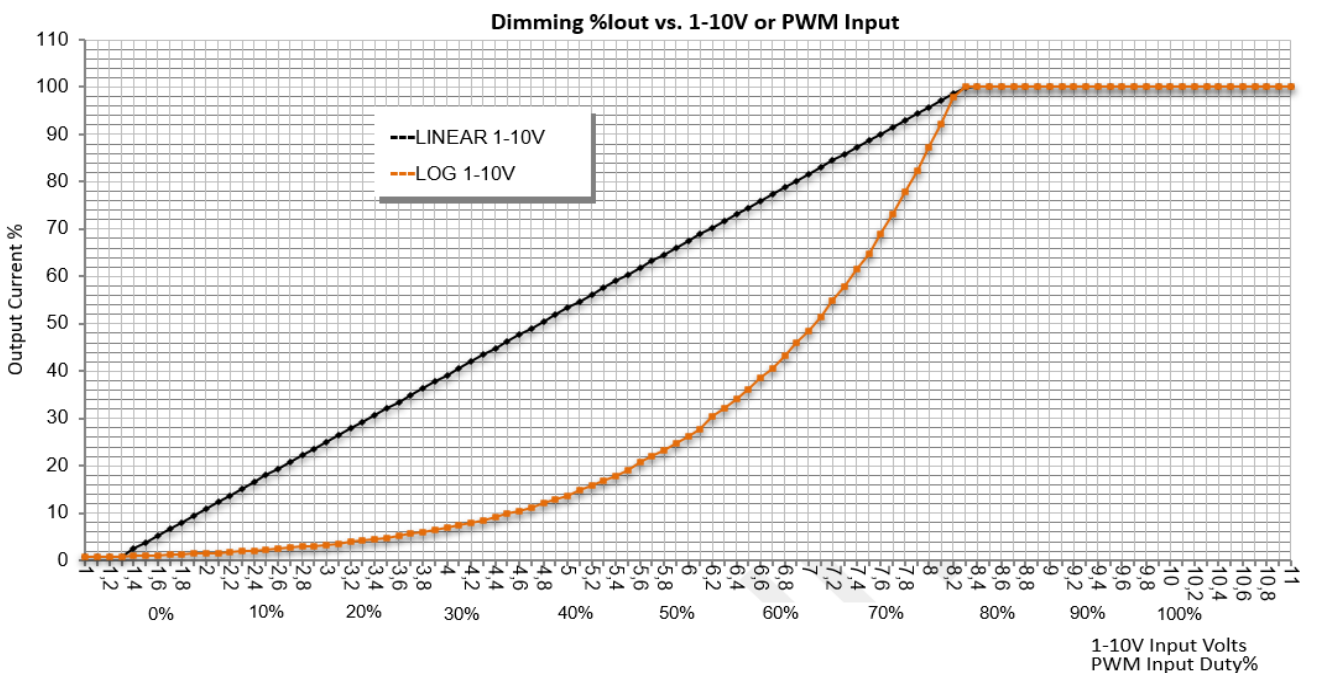
Overtemperature protection behavior



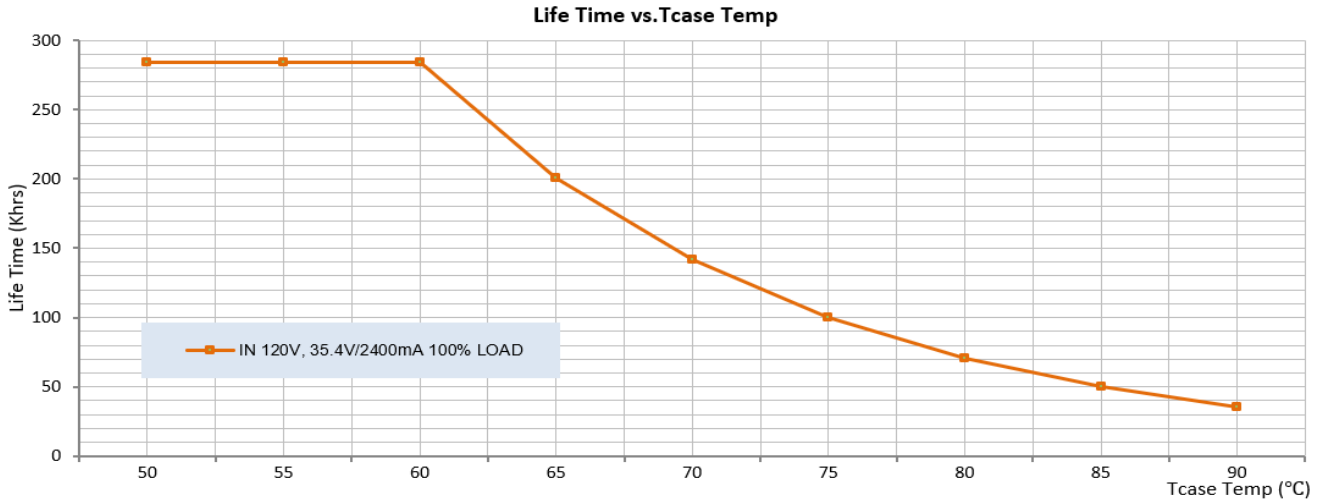
0-10V dimming curve @ minimum dimming set to 1%



1-10V Dimming curve @ minimum dimming set to 1%



Lifetime vs Tcase



Programming & current setting

Operating Mode LUD-050S140MTF - Eng.Sample

Default

Output Current

Constant Lumen

End of Life

Thermal Protection

Dimming

Current Mode

FixedCurrent

Fixed Current

Minimum Current	Operating Current	Maximum Current
400 mA	400 mA	1400 mA

Please use the Inventronics Programmer (Hardware) and Tuner4TRONIC (Software) to program current / features.
For further information please refer to www.tuner4tronic.com

Protections

- Output short circuit
- Output over current
- Over temperature protection
- Output over voltage

Programmable features

- Output current
- NTC
- Soft start
- Dim to off
- End-of-life indicator
- Dimming curve
- Constant lumen

Safety / EMC compliance

UL / cUL	UL8750, CSA-C22.2, Class 2, UL Class P
FCC	FCC Part 15 Subpart B, Class A
Ring Wave	NEMA SSL1

Ordering information

Product Naming	Ordering Code / EAN (single)	Part Number	Pieces / Package
LUM-085S240MTF	6937186100122	9LUM085S240MTF0000	20

Inventronics
2825 S. Tulsa Avenue
Oklahoma City OK 73108
United States
www.inventronicsglobal.com

inventronics