eldoLED

Technical Specifications FieldSET[™] Field-Programmable Indoor LED Driver OTi40W



General Information

Driver Description	40W 120-277V; 0-10V, 15% min	
Туре	Constant Current	
Output Power	40W (Max.)	
Programming Tool	FieldSET LED Driver Programmer	
Field Programmable	Output Current	
Features	Dimming Level	
	Dim-to-Off	

Environmental Specifications

Ambient Operating Temperature	-30°C to 50°C
Max. Case Temperature (Tc)	90°C (Max.)
	80°C (50kHrs) ¹
Max. Storage Temp.	75°C
Max. Relative Humidity (%)	85% non-condensing
Transient Protection	NEMA SSL 1-2010
	Non-Roadway 2.5kV
UL Environmental Rating	Dry and Damp
UL File number	E320395
IP Rating	IP20
EMI Compliance	FCC Part 15 Class A
Sound Rating	Class A

¹ 5 year warranty applicable at 85°C







The FieldSET OTi40W is an efficient, dimmable, compact LED driver for indoor applications. This programmable driver is compatible with the FieldSET LED Driver Programming Tool which provides visual and audible feedback programming. The FieldSET OTi40W is ideal for in-field programming and replacement.

Driver Overview

- Intended for use in LED fixtures including Indoor, Downlight fixtures.
- 40W Output
- 0-10V Dimming with 1% Minimum Dim Level

Electrical Specifications

Input

Input Voltage (VAC)	120V-277V (+/-10%)	
Frequency Range (Hz)	50-60 Hz (+/-) 10%)	
	120V	277V
Input Current (A)	0.41A	0.18A
THD @ Full load	<20%	<20%
Power Factor @ Full load	>0.9%	>0.9%
Efficiency @ Full load	≥87%	≥87%
Inrush Current (Apk) ¹	6.7, 150µs	15.6, 90µs
Line Regulation	<5%	<5%
1 Complies with NEMA 410 in	ush current requireme	nte

¹ Complies with NEMA 410 inrush current requirements.

Output

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Output Current (mA)	400-1400mA (1mA step) 700mA default
Output Voltage (VDC)	8-55VDC
Output Ripple Current	<20% @1400mA
Max. Output Power (W)	40W
LED Power-Up Time	<0.5 sec CA T-24 Compliant
Load Regulation	<3%
Line Regulation	<3%
Over Voltage Protection	Yes, non-latching
Over Load Protection	Yes, non-latching
Output Short-Circuit Protection	Yes, non-latching
Over Temperature Protection	Yes, Foldback to 50% at 100C

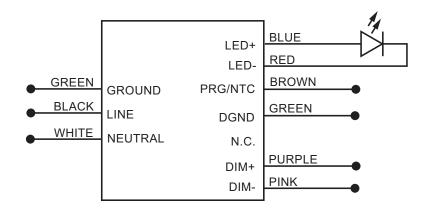
Dimming

Dimming Control	0 – 10V (Isolated) ¹
Dimming Range ¹	1-100%
Dimming Type	Current Reduction
Dimming Input Isolation	2.5kV
Source/Sink Current	0.2mA (Max.)
Dim-to-Off OFF/ON	0.7V/1V
Dim-to-off Standby Power	<1W
Dimming Interface Protection	Yes, 120-277Vac

CAUTION: More than one power supply present; Compliant with ANSI C137.1.

 $^{\rm t}$ Driver can be dimmed to TRUE 1% level (4mA) of the programmed output current of the driver. Programmable with 1mA resolution with +/- 3% accuracy.

Wiring Diagram



NOTES:

Maximum remote mounting distance is 16 feet. The Dimming input is isolated and will allow Class 2 or non-Class 2 wiring across Purple and Gray wires.

Wire extration tool is needed to extract the wires from the connectors.

Use solid copper wire only: 16-20 AWG

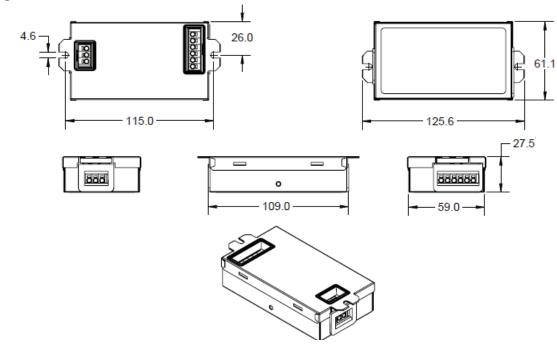
For LED load and DIM wire, 16-22 AWG is acceptable. For more detailed information and requirements, consult the light engine

information and/or information pertaining to the light engine connectors.

Key Application Notes:

Dim-to-off is a programmable (enable/disable) feature. The default mode is disabled for out-of-the-box products. If required, it must be enabled using the programmer tool.

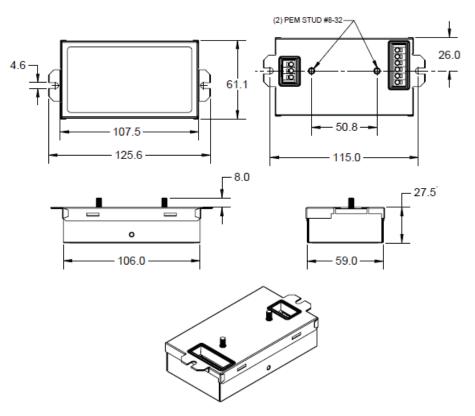
Mechanical Diagram



Housing F Style

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Le	ength	4.3" (109mm)
W	/idth	2.4" (61.1mm)
Н	eight	1.2" (27.5mm)
Μ	ounting Length	4.5" (115mm)

Mechanical Diagram



Housing J Style

Length	4.2" (106mm)
Width	2.4" (61.1mm)
Height	1.2" (27.5mm)
Mounting Length (outside)	4.5" (115mm)
Mounting Length (inside)	2.0" (50.8mm)

NOTE: Contact Technical Services for additional performance data and graphs.

Inrush Characteristic

Vin (V)	Ipeak (A)	T(@10% of Ipeak)
120	6.7	150µs
277	15.6	90µs

Complies to NEMA 410 inrush current requirements.