



J-Housing



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

### General Information

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

### Electrical Specifications

#### Input

Input Voltage (VAC)	120V-277V (+/-10%)	
Frequency Range (Hz)	50-60 Hz (+/- 10%)	
	<b>120V</b>	<b>277V</b>
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) <sup>1</sup>	6.7, 150µs	15.6, 90µs
Line Regulation	<5%	<5%

<sup>1</sup> Complies with NEMA 410 inrush current requirements.

#### Output

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

### Environmental Specifications

Ambient Operating Temperature	-30°C to 50°C
Max. Case Temperature (Tc)	90°C (Max.) 80°C (50kHrs) <sup>1</sup>
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

<sup>1</sup> 5 year warranty applicable at 85°C

### Dimming

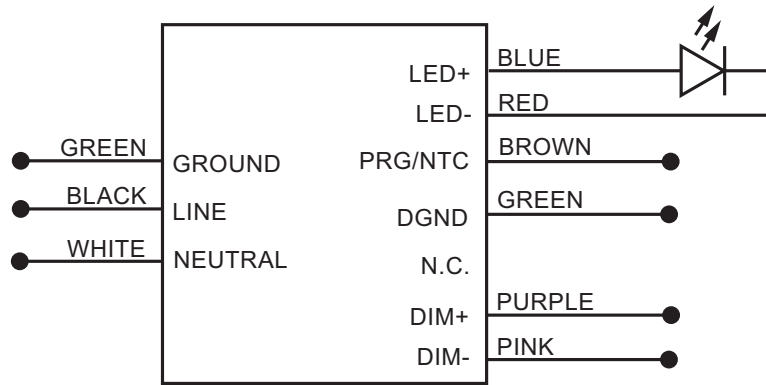
Dimming Control	0 – 10V (Isolated) <sup>1</sup>
Dimming Range <sup>1</sup>	1-100%
Dimming Type	Current Reduction
Dimming Input Isolation	2.5kV
Source/Sink Current	0.2mA (Max.)
Dim-to-Off OFF/ON	0.7V/1V
Dim-to-off Standby Power	<1W
Dimming Interface Protection	Yes, 120-277Vac

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

<sup>1</sup> 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 extraction tool is needed to extract the wires from the connectors.

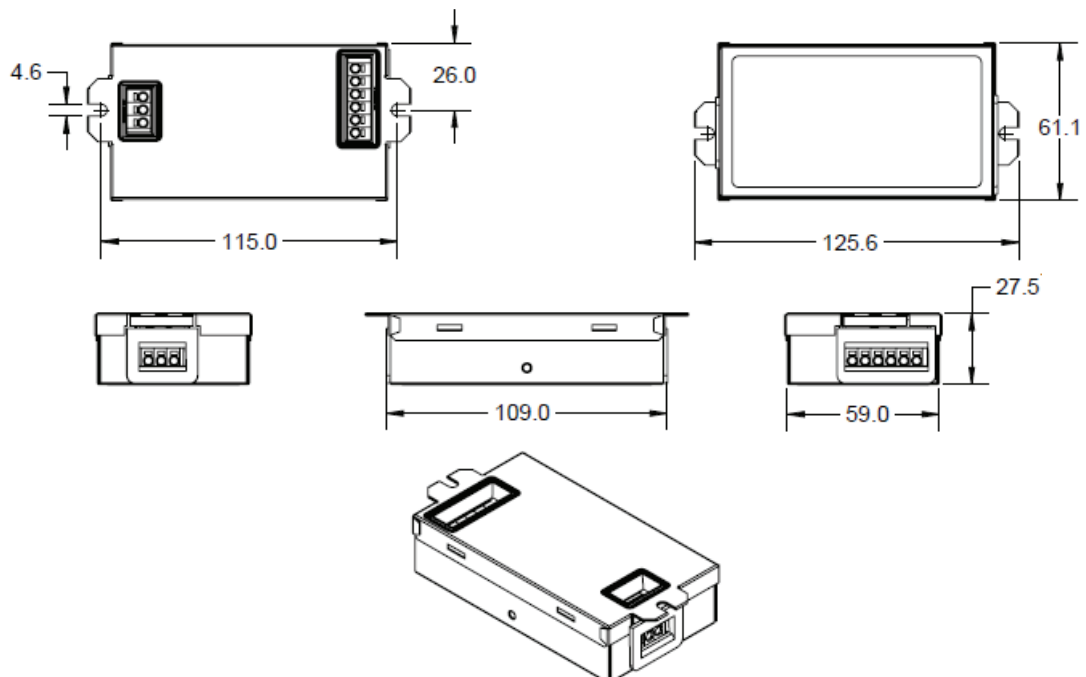
Use solid copper wire only: 16-20 AWG

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.

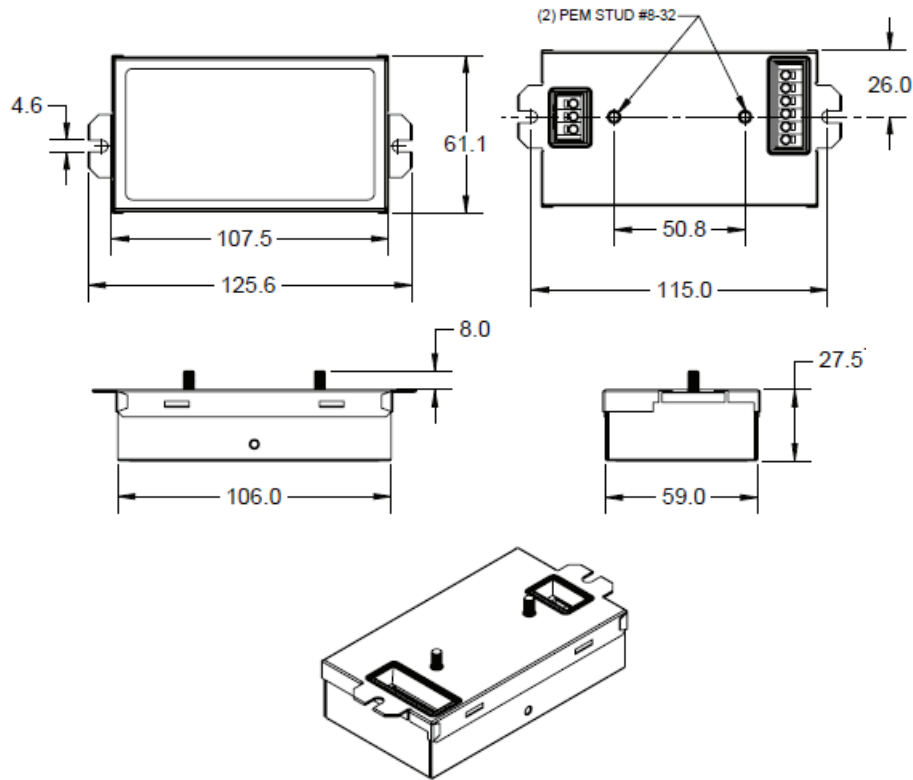
Mechanical Diagram



Housing F Style

Length	4.3" (109mm)
Width	2.4" (61.1mm)
Height	1.2" (27.5mm)
Mounting 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.

## Ordering Information

Series	Driver Type	Wattage	Input Voltage	Output Current	Control	Min Dim Level	Specialized Mounting*	Programmer
FieldSET	OTi	40W	UNV	1A4	1DIM	DIM-1	J-HOUSING	FS

### Understanding Your Driver Model

<b>FieldSET</b>	Field Service Solution			<b>1DIM</b>		0-10V Dimming		
<b>OTi</b>	OTi Intelligent Driver			<b>DIM-1</b>		Dims to 1%		
<b>40W</b>	40W Output			<b>J-HOUSING*</b>		J-Housing with PEM Studs		
<b>UNV</b>	120-277VAC Input			<b>FS</b>		Programmed using FieldSET Programmer Tool		
<b>1A4</b>	1400mA Output							

\*Specialized Mounting optional. Leave blank for standard integral mounting.

## Warranty

FieldSET and OPTOTRONIC® by eldoLED Products are covered by a 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms can be found at: [www.eldoled.com/legal/terms-and-conditions](http://www.eldoled.com/legal/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.