



The FieldSET OTi50W is an efficient, dimmable, linear 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 OTi50W is ideal for in-field programming and replacement.

#### Driver Overview

- Intended for use in LED fixtures including 2x2, 2x4 troffers, linear, strip, and architectural fixtures.
- 50W Output
- 0-10V Dimming with 1% Minimum Dim Level

#### General Information

Driver Description	50W 120-277V; 0-10V, 1% min dim
Type	Constant Current
Output Power	50W (Max.)
Programming Tool	FieldSET LED Driver Programmer
Field Programmable Features	Output Current Dimming Level Dim-to-Off

#### Environmental Specifications

Ambient Operating Temperature	-30°C to 50°C
Max. Case Temperature (Tc)	85°C <sup>1</sup> 75°C (50kHrs)
Max. Storage Temp.	70°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



#### 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)	0.52	0.23
THD @ Full load	<10%	<20%
Power Factor @ Full load	>0.9%	>0.9%
Efficiency @ Full load	≥88%	≥89%
Inrush Current (Apk)	1.33, 57µs	2.66, 46µs

##### Output

Output Current (mA)	400-1400mA (1mA step) 1050mA default
Output Voltage (VDC)	10-55VDC
Output Ripple Current	<20% @1400mA
Max. Output Power (W)	50W
LED Power-Up Time	<1 sec
Load Regulation	<5%
Line Regulation	<5%
Over Voltage Protection	Yes, non-latching
Over Load Protection	Yes, non-latching
Output Short-Circuit Protection	Yes, non-latching
Over Temperature Protection	Yes, Foldback at 100°C

#### Dimming

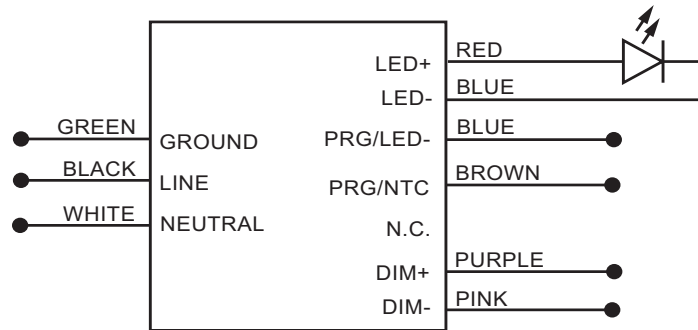
Dimming Control	0 – 10V (Isolated)
Dimming Range <sup>1</sup>	1-100%
Dimming Type	Analog
Dimming Input Isolation	2.5kV
Source/Sink Current	0.2mA (Max.)
Dim-to-Off OFF/ON	0.7V/1V
Dim-to-off Standby Power	1.4W (120V); 1.7W (277V)
Dimming Interface Protection <sup>1</sup>	Yes, 120-277Vac

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

<sup>1</sup> Driver will foldback to 30% of programming output level if AC line voltage is connected across DIM+/- terminals. Compliant with ANSI C 137.1.

# FieldSET OTi50W - Technical Specifications

## 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.

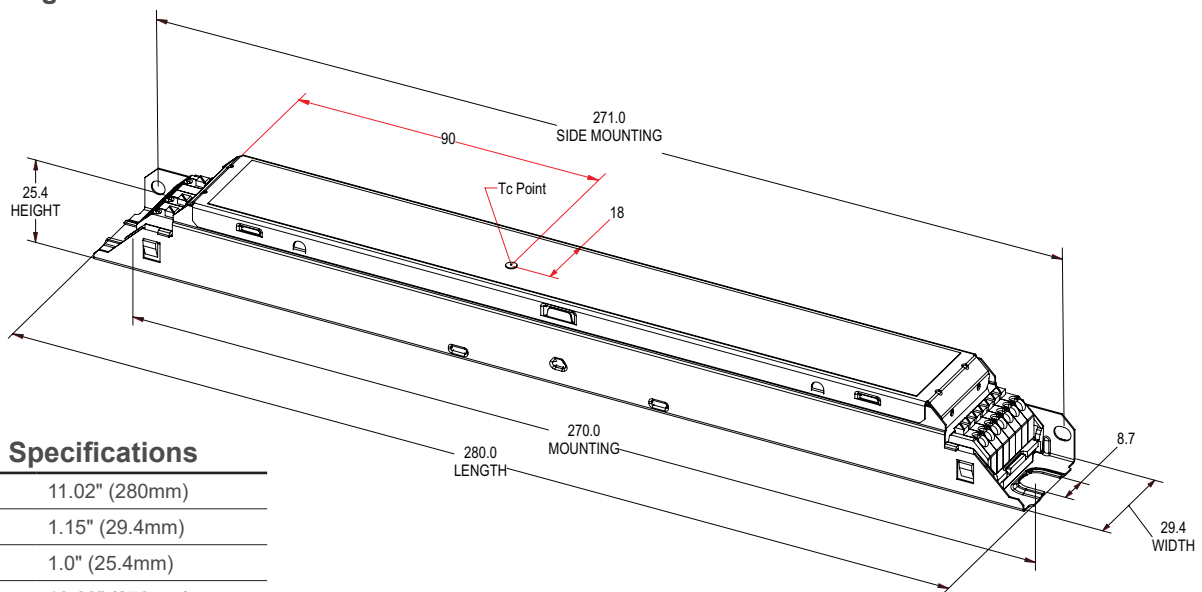
Use solid copper wire only: 16-20 AWG

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 with the programming tool.

## Mechanical Diagram



**Mechanical Specifications**

Length	11.02" (280mm)
Width	1.15" (29.4mm)
Height	1.0" (25.4mm)
Mounting Length	10.63" (270mm)
Mounting Side	10.67 (271.0mm)

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

**Inrush Characteristic**

Vin (V)	Ipeak (A)	T(@10% of Ipeak)
120	1.33	57µs
277	2.66	46µs

Complies to NEMA 410 inrush current requirements.

## Ordering Information

Series	Driver Type	Wattage	Input Voltage	Output Current	Control	Min Dim Level	Programmer
FieldSET	OTi	50W	UNV	1A0	1DIM	DIM-1	FS

### Understanding Your Driver Model

<b>FieldSET</b>	Field Service Solution			<b>1A0</b>			1050mA Output Max
<b>OTi</b>	OTi Intelligent Driver			<b>1DIM</b>			0-10V Dimming
<b>50W</b>	50W Output			<b>DIM-1</b>			Dims to 1%
<b>UNV</b>	120-277VAC Input			<b>FS</b>			Programmed using FieldSET Programmer Tool

## 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.