



The FieldSET OTi85W 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 OTi85W is designed for in-field programming and replacement.

Driver Overview

- Intended for use in LED fixtures, including 2x2, 2x4 troffers, linear, strip, and architectural fixtures.
- 85W Output
- 0-10V Dimming with 1% Minimum Dim Level

General Information

Driver Description	85W 120-277V; 0-10V, 1% min. dim
Type	Constant Current
Output Power	85W (Max.)
Programming Tool	FieldSET LED Driver Programmer
Field Programmable Features	Output Current Dimming Level Dim-to-Off

Environmental Specifications

Ambient Operating Temperature	-40°C to 55°C
Max. Case Temperature (Tc)	85°C
	90°C (50kHrs) ¹
Max. Storage Temp.	70°C
Max. Relative Humidity (%)	85% non-condensing
Transient Protection	NEMA SSL 1-2010 (2.5kV) ANSI C82.77-5-2015 (6kV) ²
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



Electrical Specifications

Input

Input Voltage (VAC)	120V-277V (+/-10%)	
Frequency Range (Hz)	50-60 Hz (+/-) 10%	
	120V	277V
Input Current (A)	0.83A	0.36A
THD @ Full load	<10%	<20%
Power Factor @ Full load	>0.9%	>0.9%
Efficiency @ Full load	≥90%	≥91%
Inrush Current (Apk) ¹	37.4	84.7

Output

Output Current (mA)	700-2300mA (1mA step)
Output Voltage (VDC)	10-55VDC
Output Ripple Current	<5% @2300mA
Max. Output Power (W)	85W
LED Power-Up Time	<1 sec
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 105°C

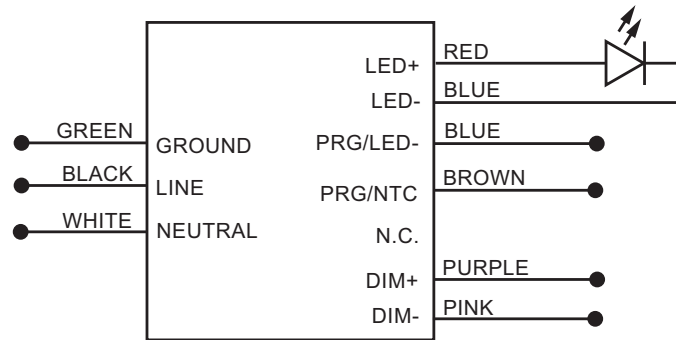
Dimming

Dimming Control	0 – 10V (Isolated)
Dimming Range ¹	1-100%; 1-100%
Dimming Type	Current Reduction
Dimming Input Isolation	2.5kV
Source/Sink Current	0.2mA (Max.)
Dim-to-Off OFF/ON	0.8V
Dim-to-off Standby Power	<2.9W (120V); 2.5W (277V)
Dimming Interface Protection ¹	Yes, 120-277Vac

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

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

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.

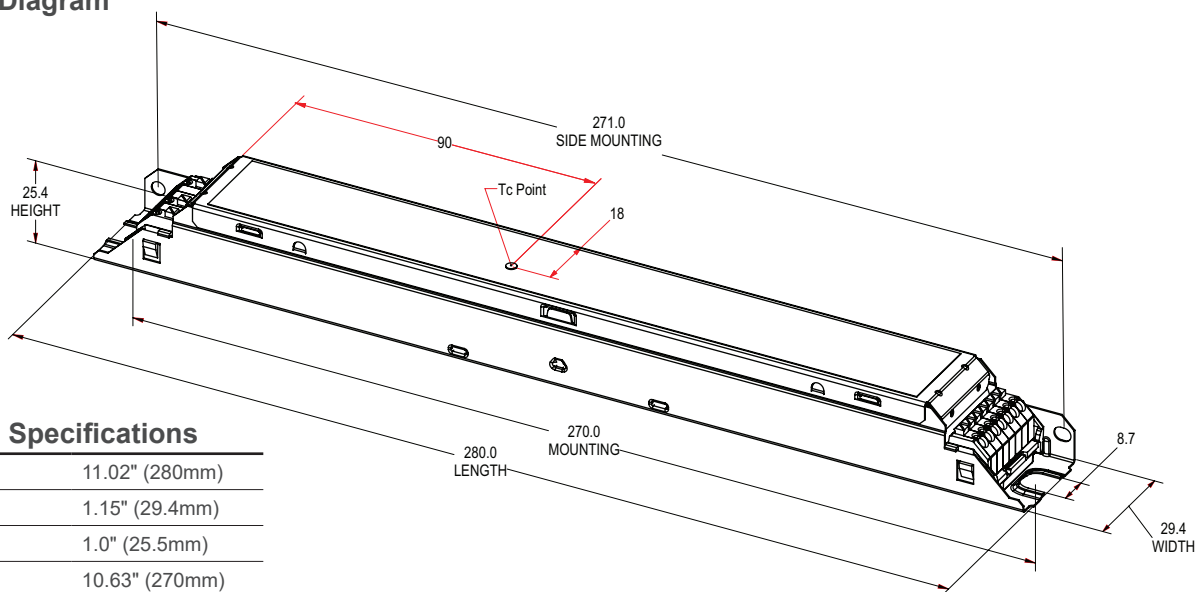
Use solid copper wire only: 16-20 AWG

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 programming tool.

Mechanical Diagram



Mechanical Specifications

Length	11.02" (280mm)
Width	1.15" (29.4mm)
Height	1.0" (25.5mm)
Mounting Length	10.63" (270mm)
Mounting Side	10.67" (271mm)

Inrush Characteristic

Vin (V)	Ipeak (A)	T(@10% of Ipeak)
120	37.4	150µs
277	84.7	160µs

Complies to NEMA 410 inrush current requirements.

Ordering Information

Series	Driver Type	Wattage	Input Voltage	Output Current	Control	Min Dim Level	Programmer
FieldSET	OTi	85W	UNV	1A0	1DIM	DIM-1	FS

Understanding Your Driver Model			
FieldSET	Field Service Solution	2A3	2300mA Output Max
OTi	OTi Intelligent Driver	1DIM	0-10V Dimming
85W	85W Output	DIM-1	Dims to 1%
UNV	120-277VAC Input	FS	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

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