

LED Engine Retrofit Kits for Ceiling & Wall Luminaires

*The Simple, Field-Installable Solution for Converting
Existing Luminaires to LED*



- Highly efficient LED technology reduces energy costs
- Protect your investment by preserving existing luminaires
- No bulbs to change means lower maintenance costs
- Simple installation can be done in the field in minutes
- ENERGY STAR® Luminaire 2.0 Listed (for rebate programs)
- Flicker Free

Retrofitting existing fixtures to efficient LED technology has never been easier. Fulham ThoroLED Retrofit Kits are available in round, half-round, or rectangular configurations to fit most standard fixtures. As cULus Classified Kits, they are suited for either field installation or factory retrofits. 0-10V and TRIAC dimmable models, as well as a wide range of color temperature options, are available.



LED Engine Retrofit Kits Product Overview

Technical Details	
Beam Angle	120°
CRI	80 Standard, 90 Available
Operating Ambient Temperature Range (Ta)	-31°F to + 113°F (-35°C to + 45°C)
Estimated Lumen Maintenance (L70)	>50,000 hours at Max Tc
Color Consistency	Binning per ANSI C78.377-2008; 7 SDCM
Maximum Screw Installation Torque	35 in-oz.
Safety/Compliance	Class 2 Lighting System; cULus File # E365124 (UL 1598C); ENERGY STAR; RoHS Compliant; FCC Part 15B
Warranty	5 years @ Max Tc from the date of manufacture



Half-Round
(7" dia.)



Rectangular
(4" x 7")



Round
(7" dia. or 9" dia.)

Part Numbering Key

TK

ThoroLED
Engine Kit

T

Control
T = TRIAC
M = 0-10V
Blank = Non-Dim

120

Input Voltage
120 = 120VAC
UNV = 120~277VAC

021

LED Module
Rated Power
011 = 11W
013 = 13W
021 = 21W
025 = 25W
032 = 32W
039 = 39W

RD

Shape
RD = Round
HR = Half-Round
RT = Rectangular

30

Color
Temperature
Standard:
27 = 2700K
30 = 3000K
40 = 4000K
Custom:
35 = 3500K
50 = 5000K

0

Configuration
0 = Standard 80 CRI
1 = 90 CRI
2 = 80 CRI &
Conformal Coating (Outdoor)
3 = 90 CRI &
Conformal Coating (Outdoor)

1

Generation
Round = 1
Half-Round = 1
Rectangular = 6

Kit Includes*:



LED Engine



Installation
Hardware



Required UL
Classified Labels



Installation Instructions

*Actual components vary based on engine type



LED Engine Retrofit Kits for Wall-Mounted Luminaires

Product Models - Half-Round									
Model Number (Complete Kit)	Input Watts	Input Voltage (VAC)	Lumens@ 4000K	Dimming Type	Dimensions	Max Case Temp (Tc)	Model Number (Engine Only)	ENERGY STAR Listed*	ENERGY STAR CSD*
TKMUNV011HRxxx1	11	UNV	1155	0-10V	7" diameter x 1.22" H	90°C Module 90°C Driver	TEMUNV011HRxxx1		
TKT120013HRxxx1	13	120	1445	TRIAC	7" diameter x 1.22" H	90°C Module 88°C Driver	TET120013HRxxx1		✓
TKMUNV013HRxxx1	13	UNV	1445	0-10V	7" diameter x 1.22" H	90°C Module 90°C Driver	TEMUNV013HRxxx1		✓
Product Models - Rectangular									
TKMUNV011RTxxx6	11	UNV	1155	0-10V	7" L x 4" W x 1.22" H	90°C Module 90°C Driver	TEMUNV011RTxxx6		
TKT120013RTxxx6	13	120	1445	TRIAC	7" L x 4" W x 1.22" H	90°C Module 88°C Driver	TET120013RTxxx6		✓
TKMUNV013RTxxx6	13	UNV	1445	0-10V	7" L x 4" W x 1.22" H	90°C Module 90°C Driver	TEMUNV013RTxxx6		✓



LED Engine Retrofit Kits for Ceiling-Mounted Luminaires

Product Models - Round									
Model Number (Complete Kit)	Input Watts	Input Voltage (VAC)	Lumens@ 4000K	Dimming Type	Diameter	Max Case Temp (Tc)	Model Number (Engine Only)	ENERGY STAR Listed*	ENERGY STAR CSD*
TKMUNV011RDxxx1	11	UNV	1155	0-10V	7"	90°C Module 90°C Driver	TEMUNV011RDxxx1		✓
TKT120013RDxxx1	13	120	1445	TRIAC	7"	90°C Module 88°C Driver	TET120013RDxxx1		✓
TKMUNV013RDxxx1	13	UNV	1445	0-10V	7"	90°C Module 90°C Driver	TEMUNV013RDxxx1		✓
TKT120021RDxxx1	21	120	2305	TRIAC	9"	90°C Module 80°C Driver	TET120021RDxxx1		✓
TKMUNV021RDxxx1	21	UNV	2305	0-10V	9"	90°C Module 86°C Driver	TEMUNV021RDxxx1		✓
TKT120025RDxxx1	25	120	2880	TRIAC	9"	90°C Module 80°C Driver	TET120025RDxxx1		✓
TKMUNV025RDxxx1	25	UNV	2880	0-10V	9"	90°C Module 86°C Driver	TEMUNV025RDxxx1		✓
TKMUNV032RDxxx1	32	UNV	3200	0-10V	9"	90°C Module 90°C Driver	TEMUNV032RDxxx1		✓
TKUNV032RDxxx1	32	UNV	3200	Non-dimming	9"	90°C Module 90°C Driver	TEUNV032RDxxx1		✓
TKMUNV039RDxxx1	39	UNV	4000	0-10V	9"	90°C Module 90°C Driver	TEMUNV039RDxxx1		✓
TKUNV039RDxxx1	39	UNV	4000	Non-dimming	9"	90°C Module 90°C Driver	TEUNV039RDxxx1		✓

* ENERGY STAR designations: Listed = Luminaire 2.0. CSD= Certified Subcomponent Database

Why Convert To LED?

Fulham's **ThoroLED Retrofit Kits** combine all the elements of an LED lighting system in one easy-to-install kit. The system is based on a specially designed ThoroLED module, available in several shapes and wattages, a range of color temperatures, and either 80 or 90 CRI. A ThoroLED driver is then mounted directly on the module. This marriage of Fulham components ensures maximum efficiency and reliability. Hardware, installation instructions, and required UL labels are included with the kit. The result is a complete solution for converting existing luminaires to highly efficient LED.

ENERGY STAR®

Fulham LED Retrofit Kits are certified to ENERGY STAR Luminaire 2.0 specifications and/or included in the ENERGY STAR Certified Subcomponent Database, facilitating use of valuable rebate programs.

High Efficiency

Fulham's LED Engine Retrofit Kits typically offer at least twice the lumens per watt of less efficient fluorescent lamps.

Installation

Takes a matter of minutes, making ThoroLED Retrofit Kits ideal for high volume projects like hotels and office buildings.

Maintenance

LED fixtures have a significantly longer lifetime (50,000 hours at L70) than fluorescent lamps, reducing the number of lamp changes.

Aesthetics

LED Retrofit Kits provide a fuller, more even light than traditional fluorescent lamps, with the small profile of the drivers eliminating shadows on the inside of the luminaire.

