

the future of lighting is here



## TE Connectivity introduces the all new NEVALO SSL System Advanced Solid State Lighting Solutions for Luminaire Manufacturers

**The future of lighting is upon us. It's called SSL.** Solid State Lighting is expected to grow to more than half of all residential and commercial fixtures in the next few years. Tackling new designs and converting your existing luminaires and fixtures to SSL requires new technology and new expertise. The NEVALO SSL System is designed to facilitate the transition from traditional light sources to new electronic LED lighting fixtures.

The new NEVALO SSL System from TE is designed to move you into this new world quickly, efficiently and reliably. This highly-engineered state-of-the-art, plug-and-play system relieves you of the electronic and thermal engineering tasks so you can focus your resources on what you do best.



## The NEVALO SSL System from TE

TE has assembled a world-class engineering team **to create the NEVALO SSL System.**

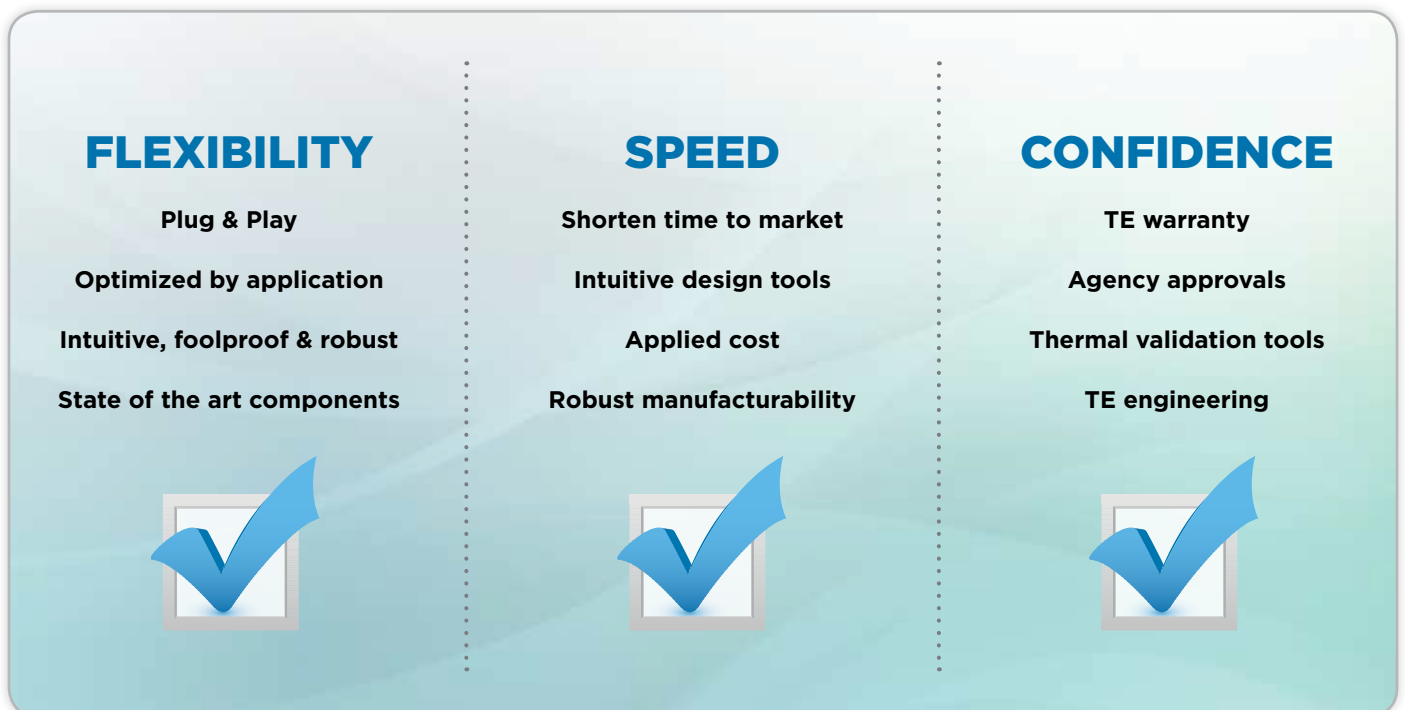
**Our NEVALO product is designed to help optimize the design and manufacture of your solid state lighting fixtures.**

**The system offers you the application flexibility**

to meet the functional and aesthetic requirements of your designs,

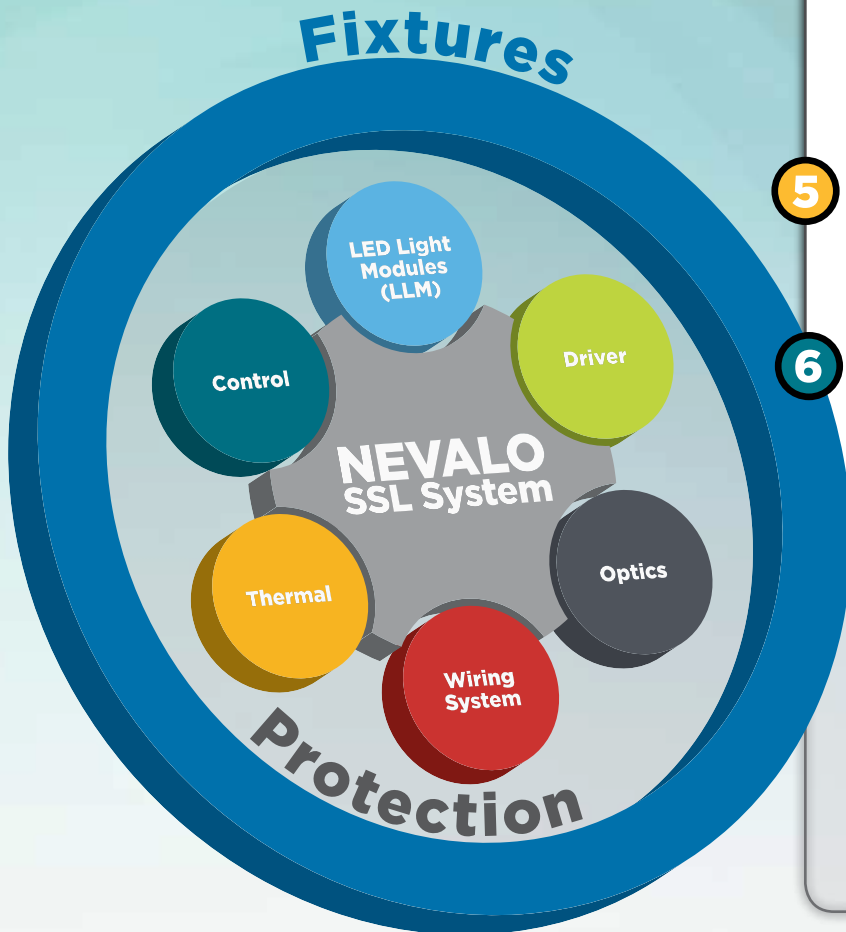
**the tools and modules to speed your designs to market,**

and the confidence backed by our commitment to quality.



# The NEVALO Solid State Lighting Design Orbit

The design and manufacture of solid state lighting fixtures brings together a collection of functions unlike those found in conventional lighting. Instead of a lamp socket (and possibly a ballast), the SSL fixture can include power conversion and control electronics, the light source and optics, interconnections and heat dissipation. The NEVALO Solid State Lighting System from TE combines all of these functions into an integrated, plug-and-play solution. This Design Orbit describes each of the essential elements.



1

## LED Light Module (LLM)

LEDs are carefully matched for color and output. They are mounted on a heat dissipating metal core circuit board. Each module includes a plug-and-play interface connector.

2

## Driver

Provides a continuous flow of controlled power to LLM. Each driver includes circuits that respond to temperature, power and user settings.

3

## Optics

Gathers and precisely redistributes the light from the LEDs on the LLM.

4

## Wiring System

Plug-and-play connection to safely power and monitor the LEDs. Keyed and color coded to ensure proper connection that includes static and polarity protection for the sensitive LEDs. Simple crimp-on connections eliminate soldering and bundles of individual wires.

5

## Thermal

Protects temperature sensitive LEDs by dissipating heat away from the modules. Extends life and maintains color consistency.

6

## Control

Allows full range dimming of SSL fixtures and connections to architectural and facility management systems. Works with daylight harvesting and demand response systems.

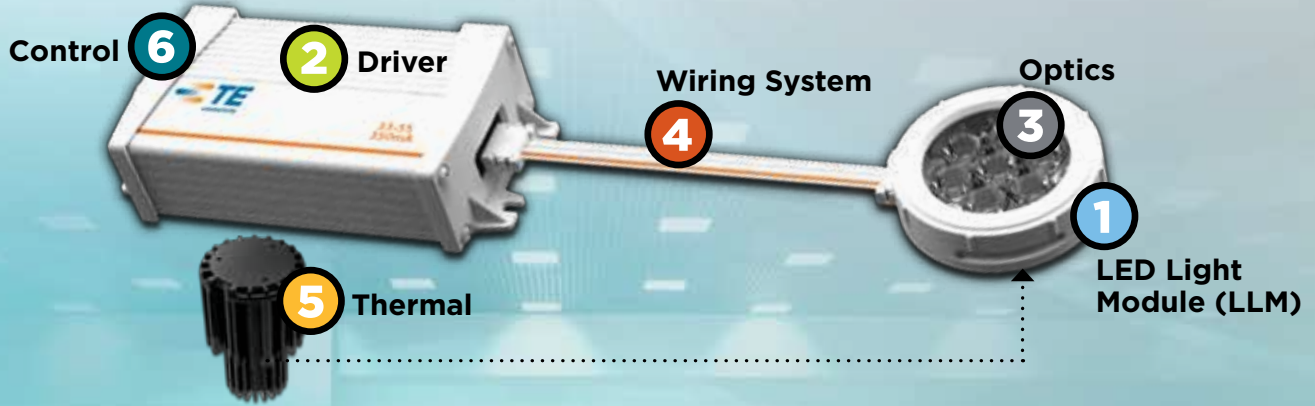
## Protection

Electrical and thermal protection is essential to assuring the high performance and life expectancy of every SSL system - protection against electrostatic discharge (ESD), overtemperature, overcurrent and reverse polarity.

# The Complete NEVALO SSL System

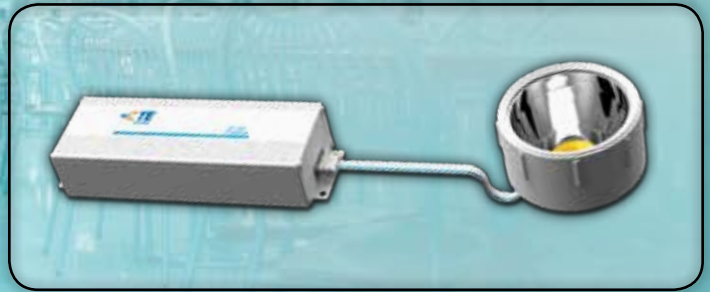
NEVALO SSL System modules are designed as building blocks

- Easy to assemble into a complete system.

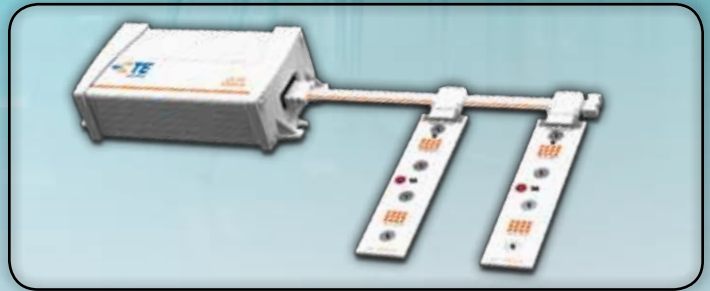


## Application Examples

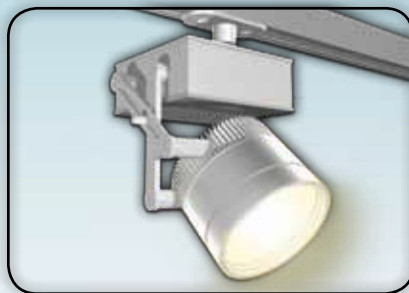
Architectural Downlight



Area/Flat Wall Mount (Sconce)



Track Spot Light



# NEVALO SSL System Components

Your SSL fixtures must be designed for both functionality and style. The NEVALO SSL System components are designed to meet both requirements. LED Light Modules (LLM) are offered in rectangular and circular configurations with multiple LED configurations. Drivers, cables, and connectors are designed with flexibility in mind. Heat sinks are offered to match every LLM. For circular systems, sockets and optics complete the job.

## 1 LED Light Module (LLM)



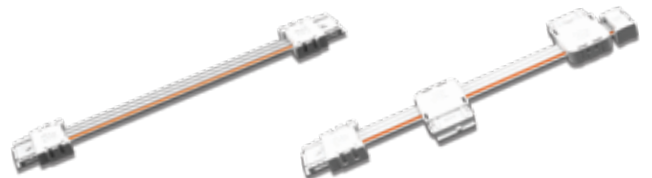
## 2 Driver



## 3 Optics



## 4 Wiring System



## 5 Thermal



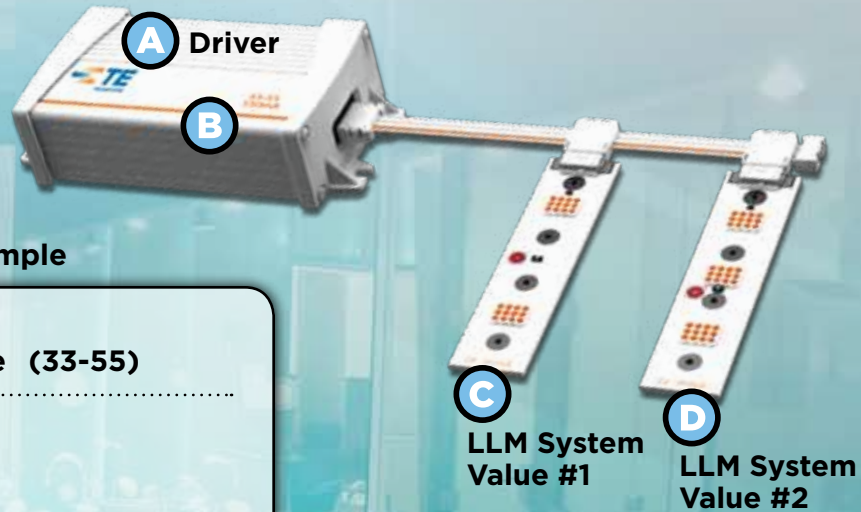
## 6 Control

NEVALO system compatible with most dimmers  
NOTE: DIMMERS NOT SOLD BY TE



## SSL System Budget

The SSL system budget simplifies fixture design and decreases opportunities for errors. Color coding confirms that the right subassemblies have been chosen. As you build your system, you simply check that the color codes match and that the total LLM budget is within the specific driver's range.



### Budget Calculation Example


**B** Driver Budget Range (33-55)

**C** LLM #1 22

**D** LLM #2 33

**TOTAL = 55**

The total must be equal to or fall between the Driver Budget Range.

 **System is good**

## NEVALO SSL System Configurator

Whether your building a complete SSL solution or simply adding a cable assembly, **the NEVALO configurator allows you to easily incorporate innovative lighting components into your customized system.**

Backed by TE's engineering expertise and available five-year warranty, the NEVALO configurator guides you as you create an efficient solution, build a bill of materials and submit your project for a quote.



## Thermal Monitor

An evaluation tool is provided to confirm the thermal performance of every LLM in your fixture design. The evaluation tool includes PC software plus a thermal test board that matches the production version of the LLM.

**Thermal Monitor Testing Software**



**Thermal LLM**



**Thermal Test Instrument  
(Break Out Box)**



## SSL Evaluation Kits for the Designer

**SSL designer kits are available by application type : downlight, wall mount and track,** and additional NEVALO system components for various lumen outputs. Each kit includes drivers, LLMs, heat sinks, wiring systems and technical product information which assists in the creation and validation of a designer's luminaire design concept.

## Warranty

TE will warrant the NEVALO SSL System for a period of 5 years.

For complete warranty details, please visit our website at [nevalo.com](http://nevalo.com).

**nevalo.com**

1-855-638-2561

**te.com**

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9-1773458-7 CIS FP 3M 04/2011

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