

LED Modulinear

What is it used for?

Designed to integrate perfectly with modern contemporary architecture, the [LED Modulinear](#) provides a visually clean geometric look for high-end residential, upscale retail, offices, hospitality applications such as restaurants, hotels, public spaces; as well as galleries and museums.

What is unique about it?

The important differences between JESCO LED Modulinear and other similar-looking products are as follows:

- 1) **ETL listing** – We have several installation options specifically aimed at US residential and commercial NEC code compliant specifications
- 2) **Product design** – JESCO has the highest quality LED sources of our own specification. The LED Modulinear is available in multiple sizes, multiple housing and trim colors (as well as trimless), and with multiple color temperature and beam angle choices for the modules.
- 3) **Energy Savings** - Each Light Unit employs a high performance long-life energy-saving 10W LED which is comparable to a PAR20 50W halogen lamp.

Reliable, sophisticated, installation-friendly and code-compliant. All of which add up to a turnkey product line.

How do I specify the fixture correctly?

For maximum customability and ease of maintenance Housings and LED Units are sold separately.

As an example, for the 3-Light LED Modulinear, a complete specification consists of: one Housing Unit (ML431HT WW) + one LED Lighting Unit (ML431LU 10 25 30 W). This example provides a 3 Light Modulinear Housing, 120V, White Trim, White Housing + a 3 LED Light Modulinear Lighting Unit, 10W per Module, 25°, 3000K, White LED Module.

What thickness of ceiling can this fixture accommodate?

The LED Modulinear is specially designed so that can be installed in ceilings up to 2" thick.

What do I do if the hole cut into the ceiling is not perfectly straight?

Standard 3/4" overlap flanges assure a clean installation with JESCO's pull-tight torsion springs, allowing forgiveness to minor on-site cutting errors.

Where do I make my electrical connections?

The LED Modulinear has a specially designed outlet box integrated onto the fixture which provides for easier access and for more space for wiring connections.



What is the standard operating voltage for the LED Modulinear?

These products are a line voltage system and work at standard 120V.

How adjustable are the light modules?

Light Units have a dual-aim adjustment mechanism to direct light where needed and include a snap-in glare reduction insert. Each LED light module has a 365° rotation and can tilt 40° which eliminates chances for dark spots and cut-off.

How can I control the light output?

Each fixture can be specified with either a 1-light, 2-light, 3-light or 4-light unit. These light units are available with light beam spreads of 12° (narrow), 25° (medium) and 40° (wide).

Each individual LED module can also be controlled with the use of [optional lenses](#). In order to use MR16 type optional lenses you must specify the Optional Lens Holder, [ML4A-LEN2](#). This holder holds one or two lenses, such as dichroic color filters, frosted lenses, softening lenses, linear diffusers or prismatic diffusers, and provides the ability to customize the desired look and output to meet specific lighting needs.

What are the different color temperatures of the LED Unit?

We offer our LEDs in Kelvin color temperatures of 3000°K and 4000°K.

The lower the color temperature the warmer the color - 2700°K is considered warm white and 4000°K is considered a cooler white.

Can I mount these fixtures flush with my ceiling?

Yes, we offer a [Trimless](#)/Flangeless option which includes a 1mm thick, perforated steel trim that, when “mudded” over properly, allows the ceiling and fixture to meet in a virtually seamless manner creating a ceiling plane that is smooth and uninterrupted.

Can I dim it?

Can I connect it to my building control system?

No. This system is not dimmable. It is an on/off system only controlled by a remote switch

How do I replace the LED Modulinear?

Typically, you will not see any failures in our LED Modulinear for many, many years. In the rare event of a premature failure, we have designed the fixture for easy maintenance, so simply unplug and drop down the bad LED unit and replacing it with a new one.

What are the recommended applications for the LED Modulinear?

Adjustable Single or Multi-lamped, this recessed fixture is suitable for retail, commercial, institutional and hospitality settings for use in general lighting, accent and display applications.



How long do your LEDs last?

JESCO LEDs are designed to meet or exceed a Rated Lumen Maintenance Life or L_{70} of 50,000 hours (Meaning the LEDs will maintain at least 70% of their original light output after the fixture has been on for 50,000 hours).

That being said, exceeding the operating temperature values may damage the LEDs by reducing the lifespan, lumen output, and/or adversely impact color consistency. It is recommended that adequate airflow and heat sinking be taken into consideration in the installation and application of this product. Improper thermal management may lead to premature product failure and void the warranty. See the product specification sheets for more information.

Do the colors of your LEDs vary?

We offer LEDs in specific white color temperatures. All our LEDs are designed to maintain their color over time and across the maximum length of a run.

We exceed the market's highest standards by specifying the exact color bins when we select LEDs so that they do not fluctuate more than $\pm 200^\circ$ for warm color temperatures and $\pm 300^\circ$ for cool color temperatures. This meets or exceeds the recognized standards for color quality and guarantees uniformity and consistency of hue and color temperature across LEDs, fixtures, and manufacturing runs.

Why choose LED over any other type of lighting?

LEDs have caused a revolution in lighting. JESCO has helped lead that revolution. We were one of the first manufacturers to make the shift to the LED light source many years ago. Our LEDs are of the highest quality and they are time-tested to be dependable.

There are many reasons to make the switch to LED products. Some of the reasons include:

Technological Impact

LEDs are solid state, light emitting chips that are not encased in fragile glass enclosures or use delicate and inefficient filaments. LEDs are vibration resistant. They also do not need to warm up as they are an instant-on light source. LEDs currently offer life expectancy of 50,000 hours, on average. LEDs offer much more control of correlated color temperatures and provide the option to add color(s) either monochromatically or through RGB technology. The chips are miniscule in size which allows manufacturers to design much smaller fixtures and allows designers and end users much greater flexibility incorporating and installing these fixtures on their projects.

Financial Impact

The long life expectancy means a higher rate of return on investment – installed fixtures can last, at least, 10 years (depending on the design, the lifespan of the power source and the duty cycle of the fixture) with no maintenance. No maintenance means no labor costs and no replacement lamp costs associated with installed fixtures and lamps over the life of the fixture. Fixtures mounted in high or hard-to-reach locations are the prime candidates for LED lighting. LEDs are very efficient light sources and are cool to the touch unlike incandescent light sources which release 90% of their energy generated as heat. Due to the inherent cooler running temperatures of LEDs, HVAC system design loads can be scaled down. LEDs use much less energy per fixture than standard light sources guaranteeing savings in electrical costs far into the future. Lastly, many local energy providers are currently offering rebates to customers making the switch to LED fixtures.



Environmental Impact

LEDs are easily recyclable. They contain no mercury or lead which require special handling and disposal. LEDs do not emit harmful UV/IR which discolors fabric, furniture and artwork. The U.S. Department of Energy [estimates](#) that rapid adoption of LED lighting in the U.S. by 2027 could deliver savings of about \$265 billion, avoid the building of 40 new power plants and reduce lighting electricity demand by 33% in 2027.

All or even one of the above stated reasons may be the right reason for you to choose a fixture with an LED light source.

The last important factor when choosing an LED fixture is scrutinizing the manufacturer of the LED chip and the incorporation of this chip into the design of the lighting fixture. As the United States EPA and DOE Energy Star program states on its website "Bad design can lead to a wide range of problems, some immediately observable and some not. Poorly designed products often come with exaggerated claims while failing to deliver on the quality specifications provided." Our LED products are designed around the LED light source and not the other way around making for a well-designed, color consistent and extra long-life fixture with a proven track record. With all our LED products, JESCO offers layout assistance and technical support helping make specification, as well as installation, simple.

Therefore, always look for reputable and trusted sources of LEDs and LED fixtures - be it JESCO Lighting or anyone else.

