



LED Lighting

2021/22



Who We Are

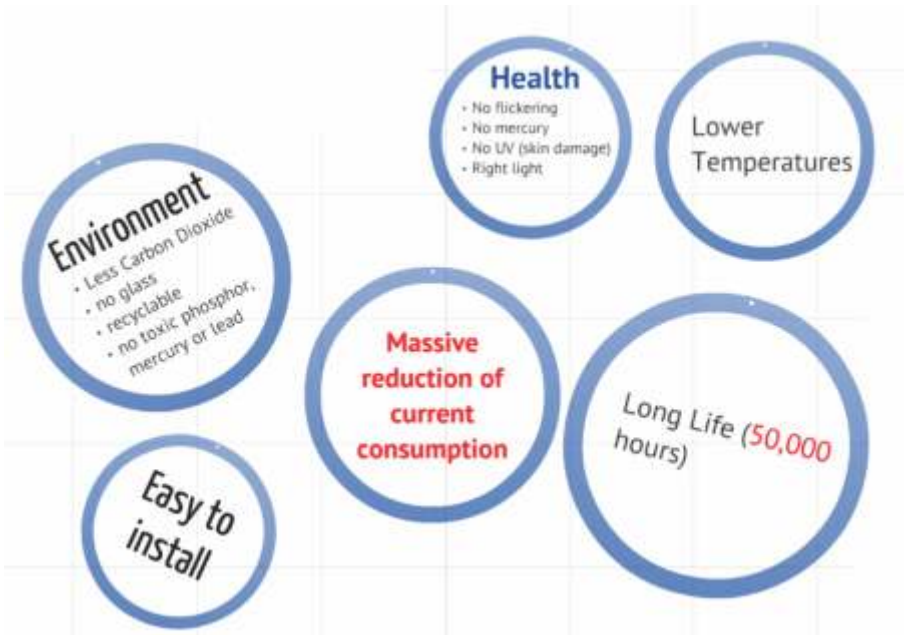
LED Industrial Group (LEDIG) is an energy efficiency solutions market leader with a focus on high quality LED (light emitting diodes) lighting. LED lighting technology has made remarkable advances and there is an application for just about every need. We work with our customers to substantially reduce their energy utility bill while enhancing their facility with LED lights, related energy efficiency products and even custom designed products to meet their individual needs. With in-house lighting illumination experts and engineers, and unlimited resources through exclusive partnerships with leading LED lighting manufacturers LED Industrial Group is capable of providing a complete solution regardless of the size and difficulty of the job.

- LED Industrial Group is an energy efficiency solutions market leader with a focus on high quality LED lighting.
- We work with clients to substantially reduce their energy utility bill while enhancing their facility with LED lights, related energy efficiency products and even custom designed products to meet their individual needs.
- With in-house LED experts and engineers, and unlimited resources through exclusive partnerships with leading LED lighting manufacturers and financial institutions, LED Industrial Group is capable of providing you a complete solution regardless of the size and difficulty of the job.



LightDec LED Advantages

- Brighter and better lighting with significant reduction of current energy consumption equals big savings
- Reduced maintenance costs with long lasting LEDs
- LED lighting saves on air-conditioning and refrigeration cost
- German and Swiss engineered top of the line products
- Newest technology allows easy installation
- Usage highest quality, patented LED's only from leading suppliers
- Considerable less CO₂, no glass, recyclable, no toxic phosphor, mercury or lead
- No flickering, no problems with cold starting
- Studies identify many health benefits garnered by replacement of fluorescent lights with LEDs
- Available in multiple colors
- LEDs are extremely durable
- LEDs do not attract insects
- LEDs do not emit harmful ultra violet light
- Guaranteed replacement at no cost to the customer



Selected Clients

HOSPITALITY

- Epic Hotel a Kimpton Hotel
- Hotel Steigenberger, Frankfurt
- Ritz Carlton
- Marquis, Miami
- Mercure Hotel, Saarbrücken
- Bimini Bay, Bahamas

RESTAURANTS

- SUBWAY
- McDonald's
- iHop
- Kelly's Cajun Grill
- Yeung's Lotus Express
- Chicken Connection
- Sergio's Restaurant & Office

RETAIL & GROCERY

- Future Designs
- City Electric Supply
- Westland Mall
- Dolphin Mall
- Tropical Meat and Fish
- SEARS
- Cristian Jewelry

AIRPORTS

- Airport Cologne/Bonn
- Airport Munich
- Turks and Caicos airport

MEDICAL

- Ivoclar Vivadent, Schaan
- Surgery Specialty Hospitals of America
- Hackensack University Medical Center

GAS STATIONS

- BP/Aral
- Exxel Petroleum
- Liberty Gas
- OMV (Austria)
- Petronas (Philippines)

CITY & LOCAL GOVERNMENTS

- City of Hialeah
- Montgomery County Maryland
- Jacksonville Transport Authority
- Miami Dade Transport

OTHER

- Florida International University
- Schumacher & Buick Car Dealer
- Suncrest Townhomes
- United Franchise Group
- Parrot Cay





United Franchise Group

LED Industrial Lighting



EXXEL Petroleum



Goodwill Industries

LED Commercial Lighting

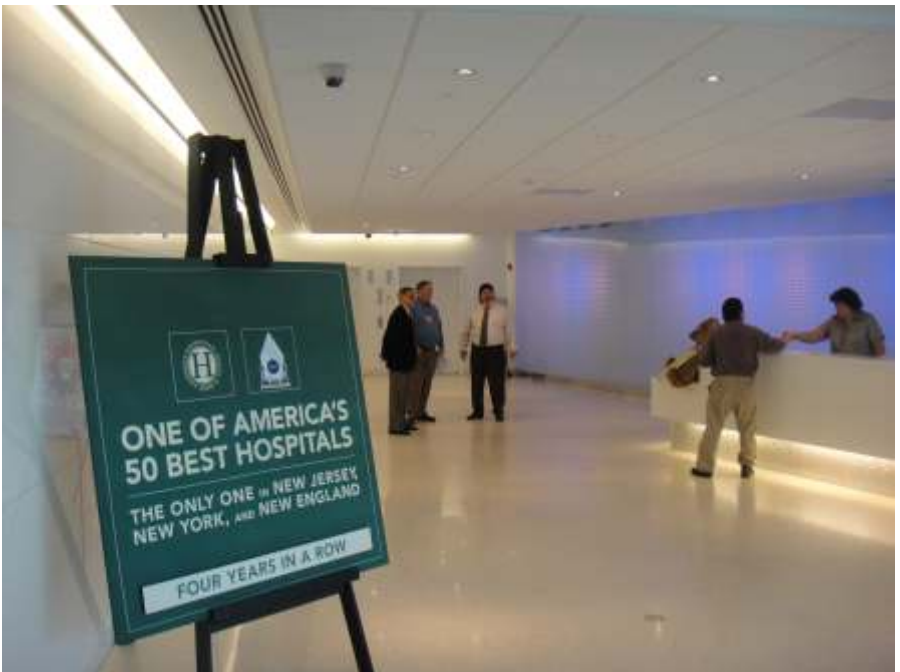


Providenciales Airport



Suncrest Townhomes

LED Public Lighting



Hackensack University Medical Center



EPIC Hotel

LED Residential Lighting



Parrot Cay



Subway Restaurant

LED Retail and Gastronomy Lighting



Cristian Jewelry



Florida International University

LED Other Lighting



Parking Garage

Comparison To Other Lighting Products

Comparison	Incandescent	Compact Fluorescent	LED
450 lumen	40W	11W	5W
800 lumen	60W	14W	7W
1100 lumen	75W	22W	11W
1600 lumen	100W	28W	18W
2600 lumen	150W	40W	26W

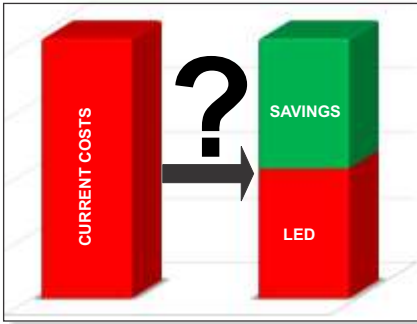
Energy Efficiency & Energy Costs	Incandescent	Compact Fluorescent	LED
Life Span (70)	1,200 Hours	8,000 hours	50,000 hours
Watts of electricity used (equivalent to a 60W incandescent bulb)	60W	14W	6W
Electricity per year	3285KW	767KW	329KW
Electricity costs per year	\$427.00	\$99.00	\$43.00

Important Facts	Incandescent	Compact Fluorescent	LED
Sensitive to low temperatures	Some	Yes	No
Sensitive to humidity	Some	Yes	No
Turns on instantly	Yes	No	Yes
Heat emitted	85 btu's/hour	30 btu's/hour	3 btu's/hour
Contains Toxic Mercury	No	Yes	No
RoHS Compliant	Yes	No	Yes
Carbon Dioxide Emission	4500 lbs/year	1051 lbs/year	451 lbs/year

Comparison	HPS	Metal Halide	LED
Power consumption (same brightness)	175W	150W	20W
Life time (hours)	12,000	9,000	50,000
Colors	Bright white	Orange	Warm and bright white
Heat generation	400F	400F	40F
Luminous Efficacy (lm/W)	100	60	140
Mercury content	30mg	30mg	0mg
Glare	Lots after glare	Lots after glare	No after glare

Finance Options

LEDs yes, but how?



There are two major issues when buying LED lights: they are expensive and there are a lot of low quality products in the market. Based on our experience, we have learned that a customer's ease-of-mind is very important. We therefore offer several options with many big benefits for you.











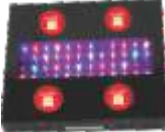
LEDIG has the solution

Feature	Purchase	Purchase +	Leasing	Saving	Service
Lighting Products	yes	yes	yes	yes	yes
Lighting Sensors	option	option	option	option	yes
Regular Warranty	yes	yes	yes	yes	yes
Extended Warranty		yes		yes	yes
Local backup stock				yes	yes
Lighting Design		yes		option	yes
Project Management		yes		option	yes
Guaranteed lighting performance					yes
Asset Management					option
Newest LED technology upgrades		yes			yes
Contract duration	NA	5 - 10	2 - 5	5 - 10	5 - 10
Financed by	client	client	bank	LEDIG	LEDIG

Purchase = Purchase of products/services
Leasing = Financing of products/services
Saving = Payment through achieved savings
Service = Lighting as a service = Fixed monthly fee

Lighting as a service is changing the traditional way of managing risks in lighting. The risks attached to choosing efficient technologies for lighting and the risks related to variation in electricity prices are no longer taken by the customer but by the lighting technology provider. By implementing this service a client benefits from significant savings on energy costs and maintenance of their lighting. This service is comparable to cell phone services. You don't buy the phone, you pay a monthly fee.

Products

<p>PAR20</p>  <p>Watt: 3 - 8 Lumen: 220 - 800</p>	<p>GU10 /MR16</p>  <p>Watt: 3 - 4 Lumen: 190 - 280</p>	<p>Bulb</p>  <p>Watt: 6 - 8 Lumen: 650 - 1,150</p>	<p>PAR30/PAR38</p>  <p>Watt: 7 Watt: 12-18 Lumen: 650 Lumen: 1400</p>
<p>Tube</p> <p>150 lm/W</p>  <p>length: 2, 3, 4, 5, 6, 8 ft Watt: 10 - 35 Lumen: 1,100 - 3,600</p>	<p>Show room</p>  <p>Watt: 40 - 60 Lumen: 3,600 - 4,800</p>	<p>Down</p>  <p>Watt: 3 - 18 Lumen: 250 - 1800</p>	<p>Panel</p>  <p>Watt: 40 Lumen: 3,500</p>
<p>Stadium/Flood</p>  <p>170 lm/W</p> <p>Watt: 300 - 975 Lumen: 50,000 - 150,000</p>	<p>Parking/Flood</p>  <p>150 lm/W</p> <p>Watt: 60 - 275 Lumen: 5,500 - 25,000</p>	<p>Canopy/Garage</p>  <p>Watt: 60 - 275 Lumen: 5,500 - 25,000</p>	<p>Street</p>  <p>150 lm/W</p> <p>Watt: 60 - 400 Lumen: 5,500 - 62,000</p>
<p>High Bay</p>  <p>Watt: 75-150 Lumen: 6,100 - 25,000</p>	<p>Baton</p>  <p>Watt: 22 - 30 Emergency Lumen: 2,000 - 5,400</p>	<p>Wall</p>  <p>Watt: 10 - 90 Lumen: 480 - 8,000</p>	<p>Greenhouse</p>  <p>Watt: 90 - 300</p>



THE NATIONS THAT TAKE ECONOMIC ADVANTAGE OF LED TECHNOLOGY NOW, WILL CAPTURE THE BULK OF THE LIGHTING MARKET IN THE FUTURE

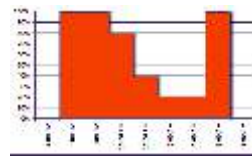
Lighting Control Solutions

Additional energy savings of up to 75%

Lighting control systems are employed to maximize the energy savings from the lighting system. A lighting control system can be an intelligent network based lighting control solution that incorporates communication between various system inputs and outputs related to lighting control with the use of one or more central computing devices. Lighting control systems are widely used on both indoor and outdoor lighting of commercial, industrial, and residential spaces. Lighting control systems serve to provide the right amount of light where and when it is needed.



Integrated Light Control System












Light intensity control
Precise on/off turning time



Line Control and Monitoring

Energy-saving light control strategies

Strategy		Potential savings
	High-end trim sets the maximum light level based on customer requirements in each space.	10–30% Lighting
	Occupancy/vacancy sensing turns lights on when occupants are in a space and off when they vacate the space.	20–60% Lighting
	Daylight harvesting dims electric lights when daylight is available to light the space.	25–60% Lighting
	Personal dimming control gives occupants the ability to set the light level.	10–20% Lighting
	Controllable window shading moves shades to reduce glare and solar heat gain.	10–20% Cooling
	Scheduling provides scheduled changes in light levels based on time of day.	10–20% Lighting
	Demand response automatically reduces lighting loads during peak electricity usage times.	30–50% During peak period
	Plug load control automatically turns off loads after occupants leave a space.	15–50% of Controlled Loads
	HVAC integration Controls heating, ventilation, and air conditioning systems through contact closure.	5–15% HVAC

Solar

The demand for solutions of self sustaining supply is increasing and LEDIG answers with technological solutions that convert sunlight into energy. With feasibility studies and an adequate installation of panels we can transform sun rays into efficient energy.

We carry out analysis where the panels will be installed and make recommendations based on:

- Amortization and
- Fastest pay-back and
- Highest efficiency



Solar has to be affordable to maximize the returns. We offer a variety of easy and convenient options to procure solar: solutions that require no up-front capital investment:

SOLAR Power Purchase Agreements

\$0 no up-front
cost to you

Pay for energy
produced on-site

Fixed payment per
kWh consumed

SOLAR Lease

\$0 no up-front
cost to you

Fixed payment for
hardware

Monthly lease payment

www.ledindustrialgroup.com

© LED Industrial Group, Inc
ALL RIGHTS RESERVED

The copyright in this document, which contains information of a proprietary nature, is vested in LED Industrial Group, Inc. The content of this document may not be used for purposes other than that for which it has been supplied and may not be reproduced, either wholly or in part, in any way whatsoever, nor may it be used by, or its content divulged to, any person whatsoever without the prior written permission of LED Industrial Group, Inc