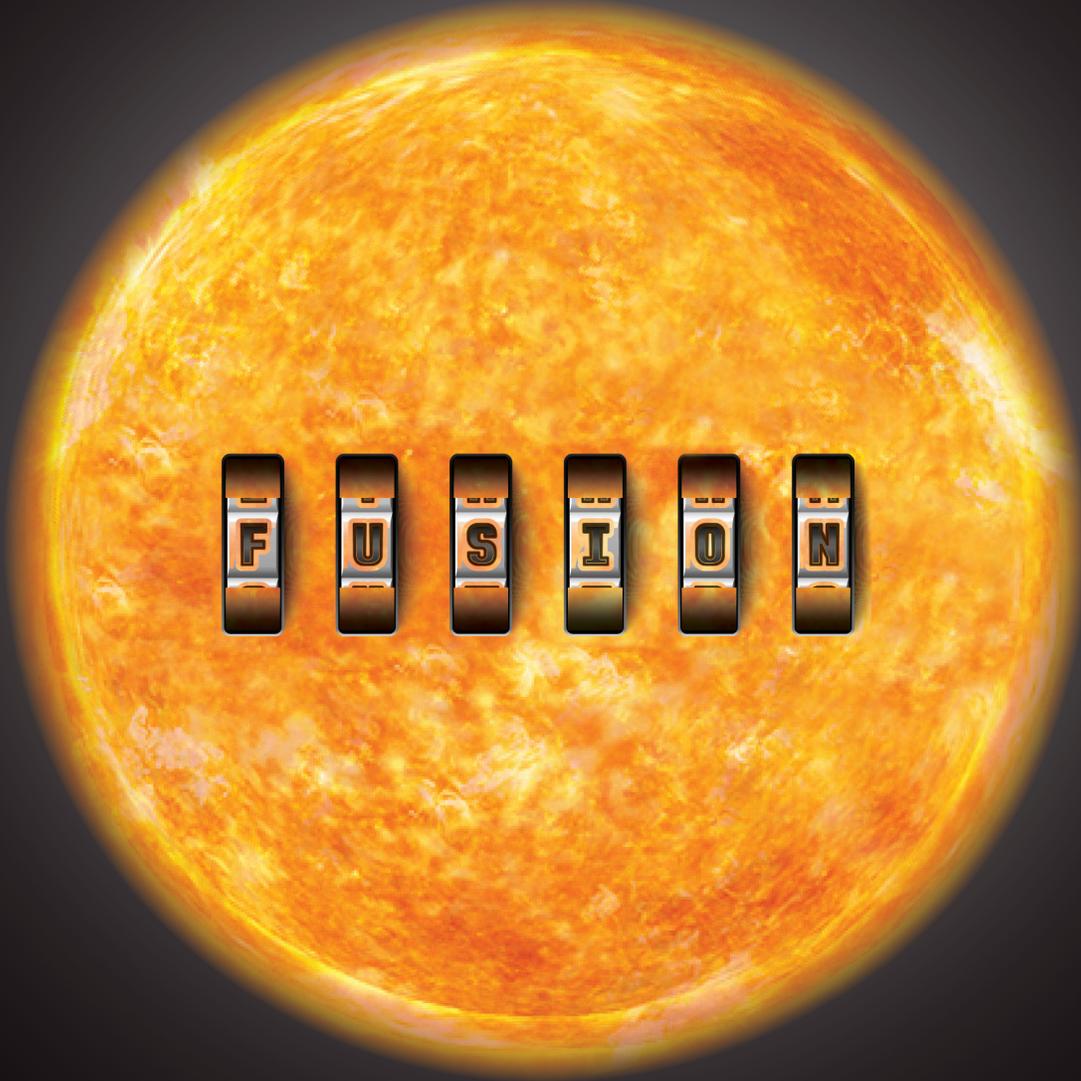


AWARD-WINNING



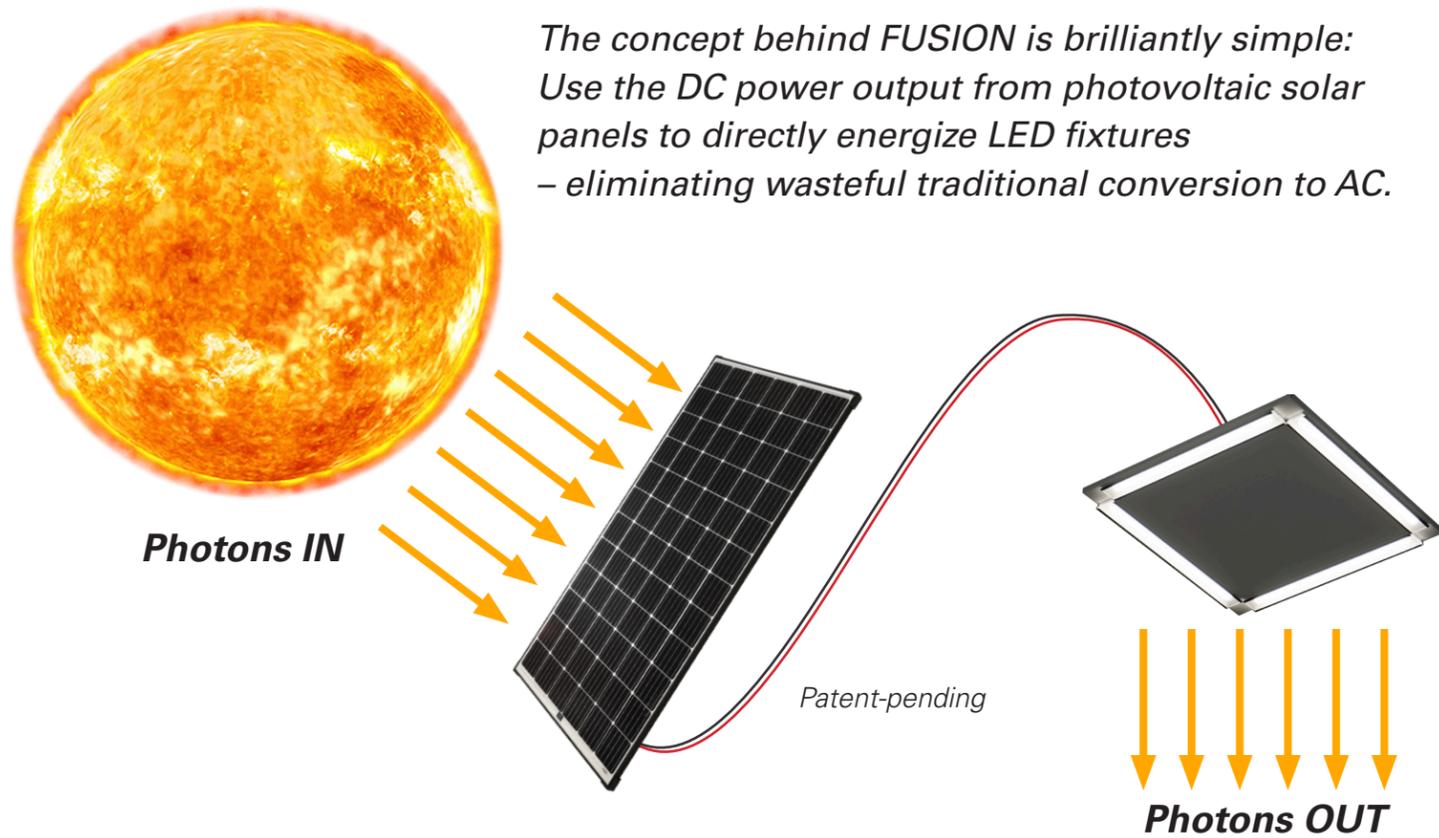
energybank®

We've cracked the code
to harness the sun

FUSION™

Solar-Powered Luminaire, Hybrid and Integrated LED Systems

*The concept behind FUSION is brilliantly simple:
Use the DC power output from photovoltaic solar panels to directly energize LED fixtures
– eliminating wasteful traditional conversion to AC.*



FUSION is the process or result of joining two or more things together to form a single entity.

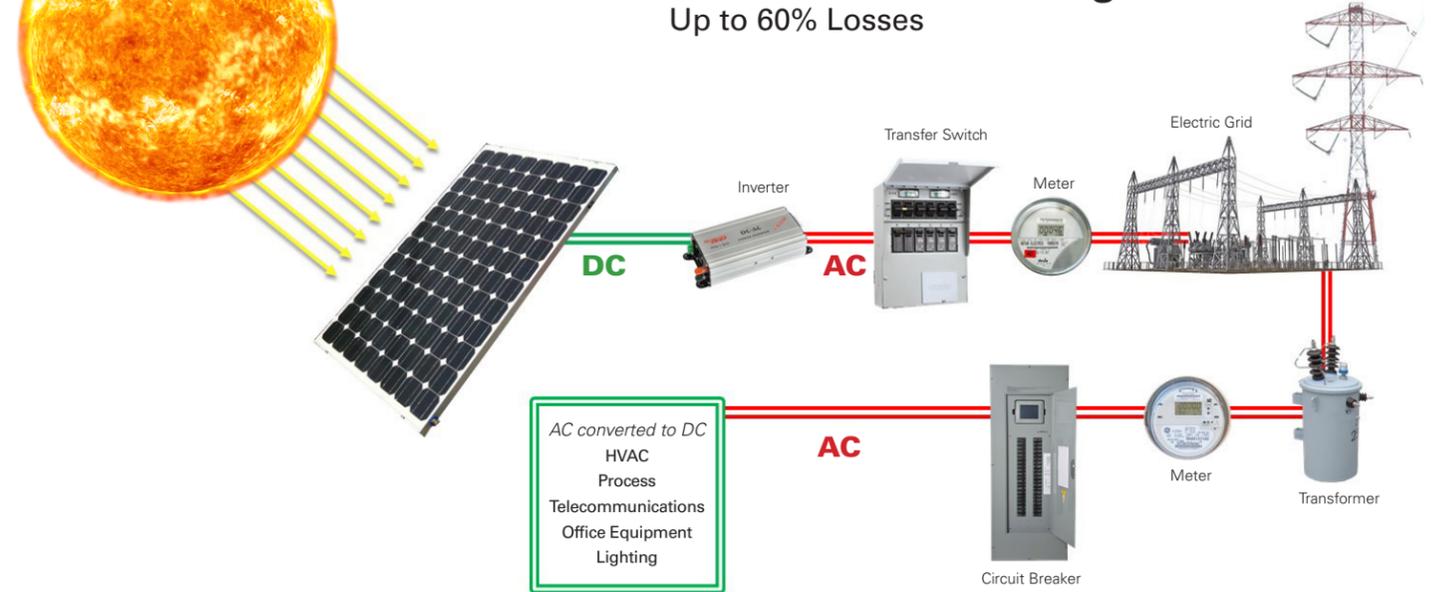
energybank has brought together:

- Photovoltaic solar
- Solid-state lighting
- IoT (Internet of Things)
- Environmental stewardship

FUSION systems deliver energy at grid parity cost at the point of use.

Traditional Grid-connected PV Integration

Up to 60% Losses



FUSION™

Distributed Energy Resource



Photons In = Photons Out

FUSION eliminates all of the expensive, high-maintenance and inefficient equipment and processes required for a traditional grid connected system.

FUSION™ Distributed Energy Resource

FUSION is a Distributed Energy Resource that delivers these advantages:

- Most cost effective use of solar generated electricity compared to traditional solar farm systems
- Reduce stress on electric grid infrastructure
- Use roof tops – not valuable land for deploying panels
- No maintenance
- No cost to rate payer



FUSION economic value proposition:

- Reduce lighting operating costs by up to 93%
- **Federal Tax Credit eligible as renewable energy source** for the complete FUSION™ Solar-Powered LED lighting system (labor, lights, solar panel, distribution module, controller, etc.)
- Eliminate/minimize lighting maintenance costs



FUSION Solar Luminaire and Integrated Luminaires

- Position photovoltaic panels exactly where needed, even if no direct access to roof
- Position FUSION luminaires at desired height and location for optimal light distribution
- Can be repositioned if needs or applications change
- Control light output of integrated luminaires via GENIUS IoT® smart device application
- Consistent color temperature of light regardless of time-of-day



✗ Solar farms are often located in remote areas far from where the power is needed. This requires the power to be delivered over an aging and constrained electrical utility grid.

Transmission and distribution losses can be as high as 60%.

During daylight hours, FUSION LED Systems can provide all or a majority of light from solar panels. No power or only minimal power from the utility is used for interior illumination when electricity costs are at their highest.

Even during early morning and late afternoon, or on overcast days, solar power can contribute significant energy, reducing operating costs.

FUSION™ Puts the Power of the Sun in your Facility

Our patent-pending systems directly integrate photovoltaic solar panel DC output with high-performance LED luminaires and controls.

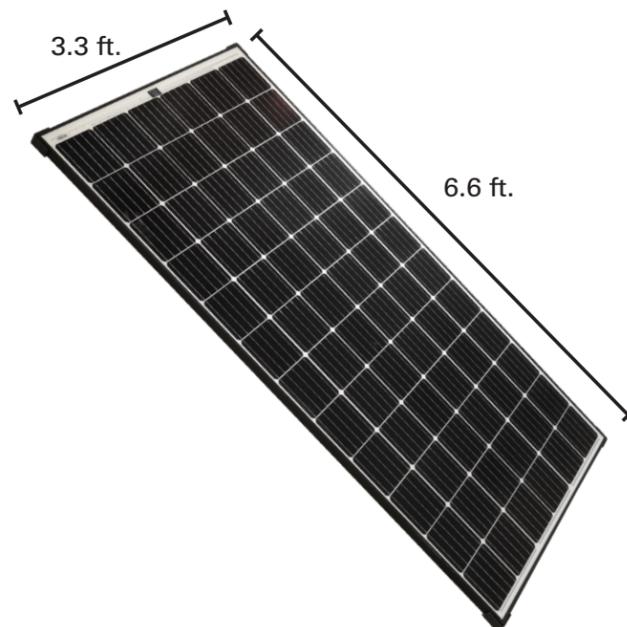
Panels can be located on the roof, side of a building, or ground level.

They can even be moved to a new location.



Mounting System

Compatible with most roof anchor products. Every component in the system is made with aluminum and stainless steel to ensure complete corrosion resistance, while also resisting the extreme wind and snow forces experienced over a building's lifetime.



FUSION™ Integrated Fixtures

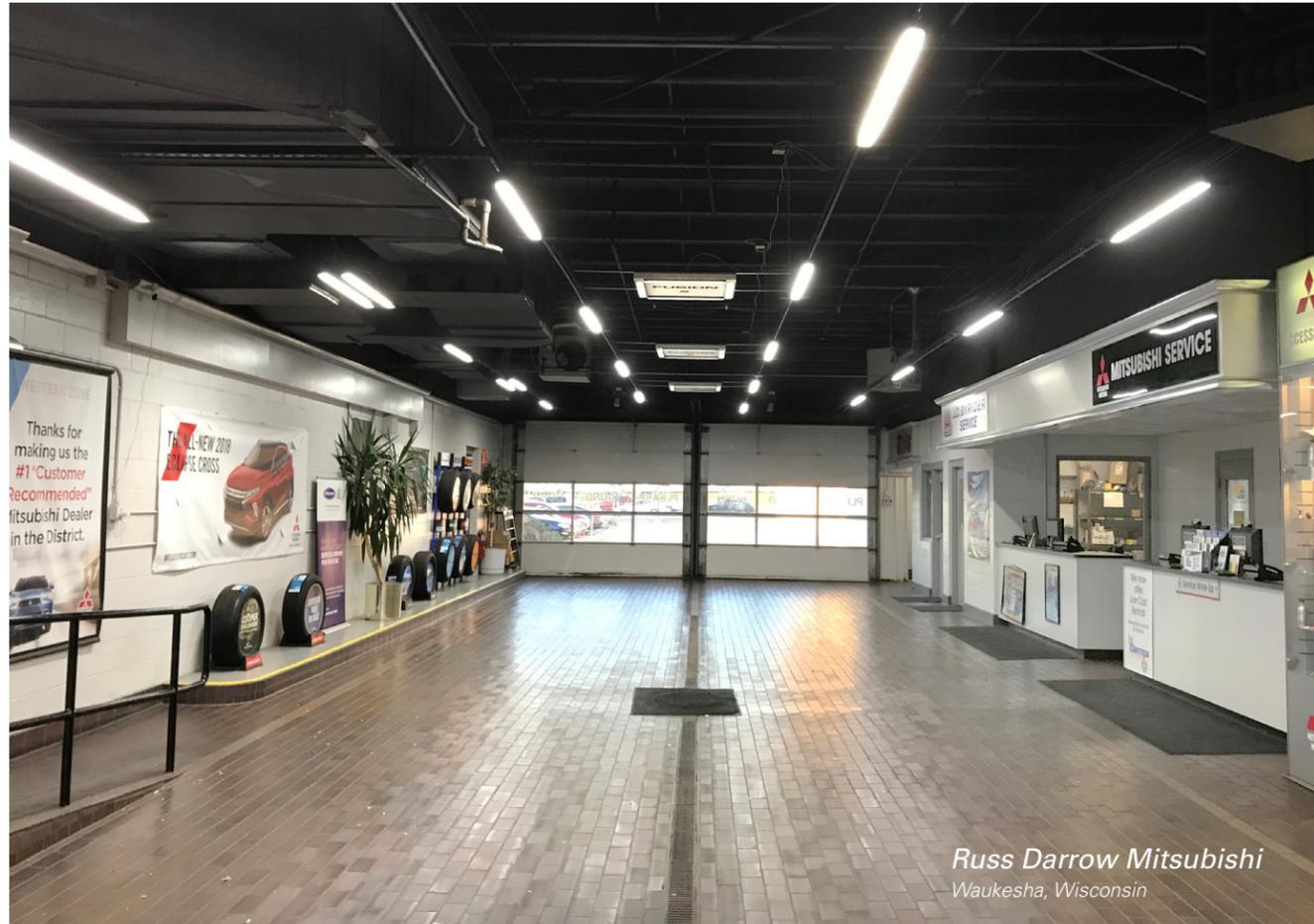


Integrated Fixtures can be powered by solar during the day. As daylight levels change, AC power controlled by the Genius IoT controller automatically keeps the light output constant.



2 - High Bay Fixtures

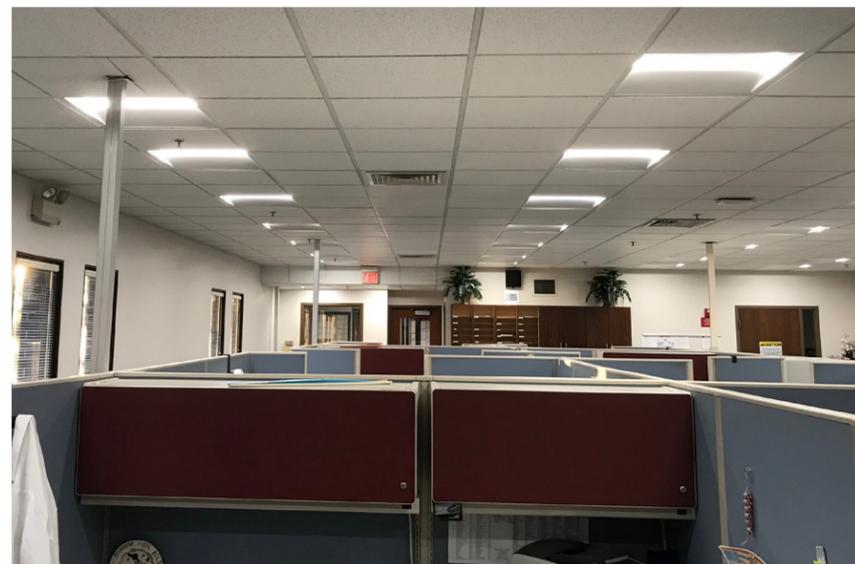
FUSION™ For every application



Russ Darrow Mitsubishi
Waukesha, Wisconsin

FUSION Solar Luminaires used in customer write-up areas reduce operating costs and demonstrate dealer commitment to sustainability initiatives.

FUSION integrated fixtures are powered by solar during the day. As daylight levels change, the AC power automatically keeps the light output constant.



Great Lakes Cheese
Plymouth, Wisconsin

TAKE CONTROL REAL-TIME METERING OPTIONS

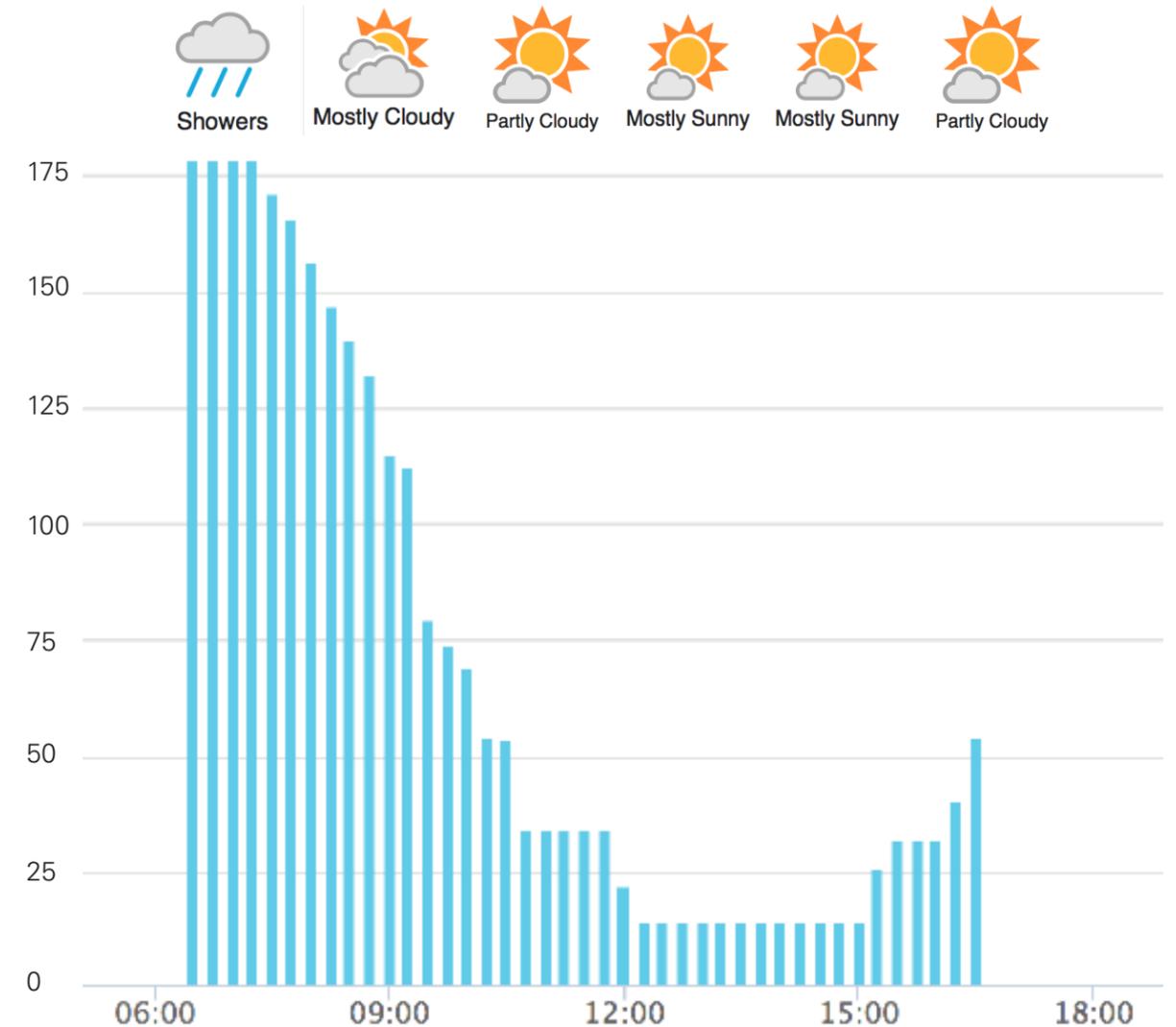
Enterprise Knowledge Management (EKM): measurement and verification solutions organize data into structures providing business intelligence for enterprise resource planning and making the most informed decisions based on data. Monitor data in real-time or track trends.

- Cloud-based real-time and historical data
- Additional incentives possible for Measurement & Verification
- Revenue Grade Metering

Graph reflects one 12-hour day from 6:00am - 6:00pm.

Solar contribution significantly reduces wattage consumption.

Weather: Rainy/Overcast changing to partly cloudy to mostly sunny.



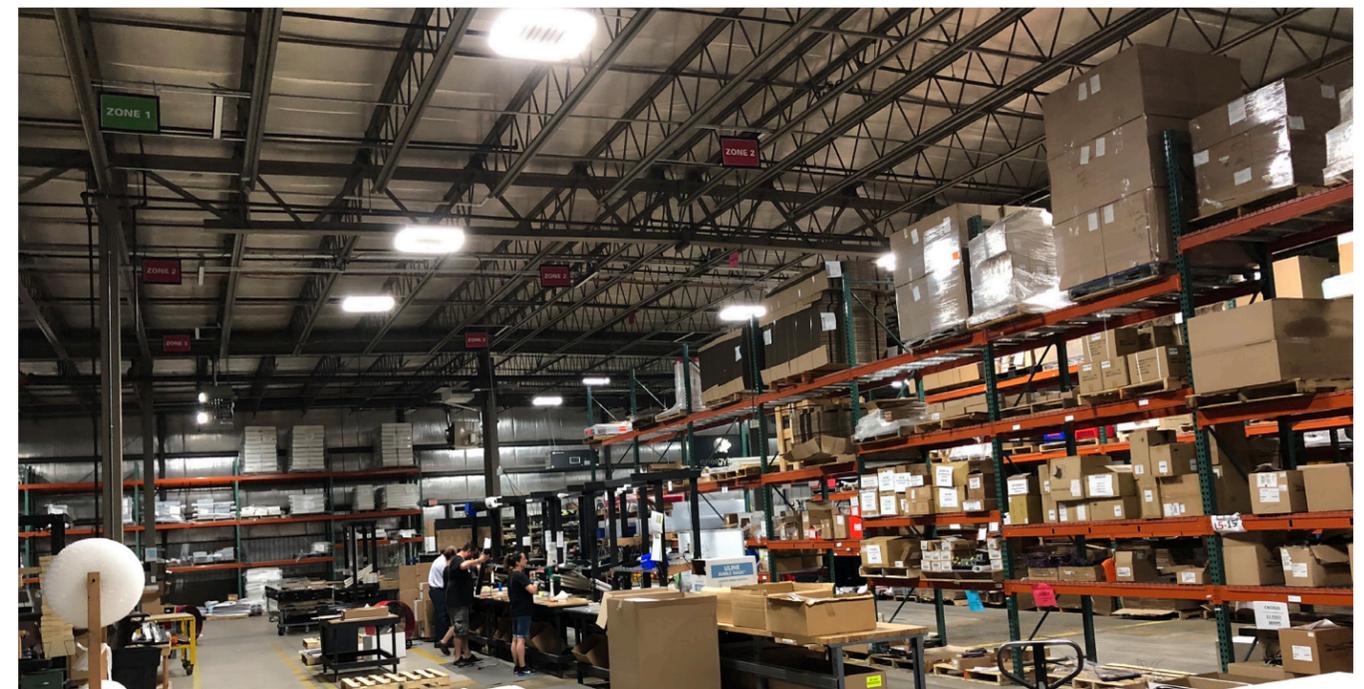
FUSION™ Solar-Powered LED System



FUSION™ SOLAR-POWERED LED DURING A POWER OUTAGE



Even with mid-day loss of power, this team remained productive and safe thanks to FUSION solar-powered LED and battery-operated power tools.



FUSION™ After 5

- 5:00pm - March 19 - Manitowoc, Wisconsin
- 20,000 sq. ft. facility
- No AC electricity (save for a single 150W night light)
- Solar-Powered illumination
- 22 FC min - 32 FC max

FUSION™ GENIUS IoT® Wireless Networked Lighting Controls



FUSION Systems can be monitored and wirelessly controlled via GENIUS IoT® smart devices. Works via Bluetooth through FUSION Control Module or 902 MHz wireless technology devices to control light levels. Quickly and easily maintain or modify specific desired light level set-points:

- Android device
- Intuitive Graphic User Interface
- Connects via Bluetooth
- Software and License included with FUSION™
- Additional user seats available
- Tamper-proof
- Set and forget
- Self-powered Wireless Motion Control
- Self-powered Wireless Rocker Master Control On/Off
- Self-powered Wireless Zone Control High/Low
- Self-powered Wireless Ambient Light Sensor for daylight harvesting



FUSION™ Control Module

Based on data collected 5.7 times per second, the FUSION digital controller modulates AC power, without any noticeable difference in maintained light levels.

Patents-pending



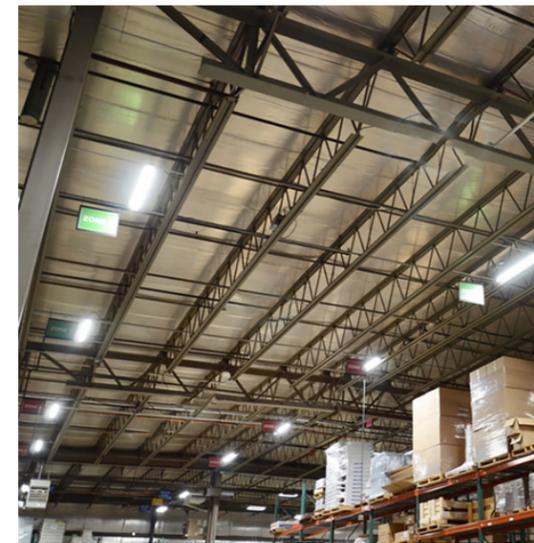
Rocker

- Wireless
- Self-powered
- Battery-less

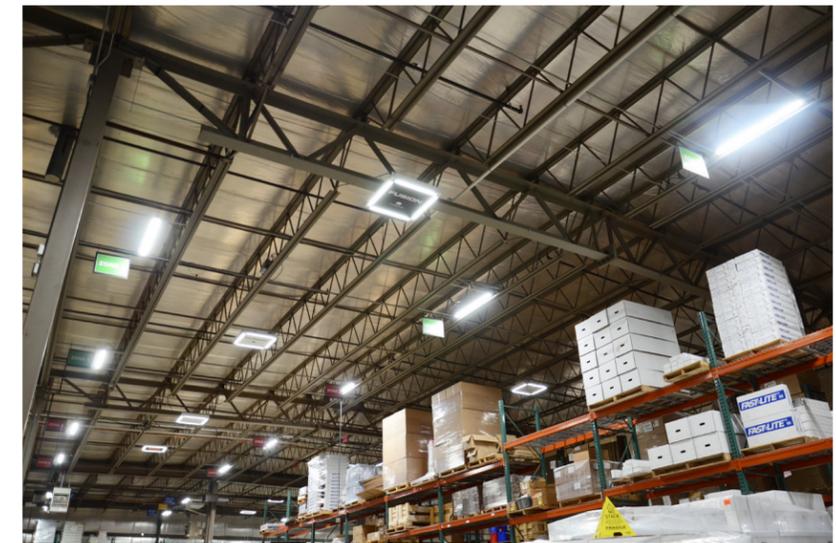
GENIUS IoT® Boardroom Control System



FUSION™ Sustainable Energy that makes Dollars and Sense



Each LED high bay fixture uses 130W of AC power.



When part of the FUSION system, each LED high bay fixture uses only 30W of AC power

76% less energy required to maintain 50 foot candles

780 watts are needed by each group of 6 high bay LED fixtures (130W each) to maintain 50 foot candles in the example above.

Only 180 watts are needed by each group of 6 high bay LED fixtures (30W each) when part of the FUSION system. That's a reduction of 76% for large portions of the day.

Fixture Type	Wattage	Operating Cost per Square Foot
HID	460W	\$0.50
HIF	221W	\$0.24
Competitive LED	150W	\$0.16
energybank LED	105W	\$0.11
energybank LED with controls	Avg. 85W	\$0.09
energybank FUSION System	Avg. 30W (during peak hours)	\$0.03

Example: 10,000ft², 30 fixtures, 40 foot-candles, 3,640 hours/year, \$0.10/kWh

FUSION™

Solar-Powered LED Systems

FUSION is as simple and reliable as your solar-powered calculator.

Photovoltaic solar panels are warranted for 25 years of solar output and, when combined with energybank LED fixtures, you can expect decades of maintenance-free illumination.



FUSION™

Award-Winning Performance

Plant Engineering
Product of the Year 2018



Insight Innovation Award
Planet Category



RESULTS YOU CAN TAKE TO THE BANK

Delivering sustainable financial and environmental results from the integration of advanced solar, LED and IoT technologies.



energybank.

www.energybankinc.com Patents: <https://energybankinc.com/ip>
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