

genius. OT

Wireless That Works

energy smarter.



Solution Overview

Our Genius IoT® wireless is so versatile, it's the Multi-Tool of IoT Controls.

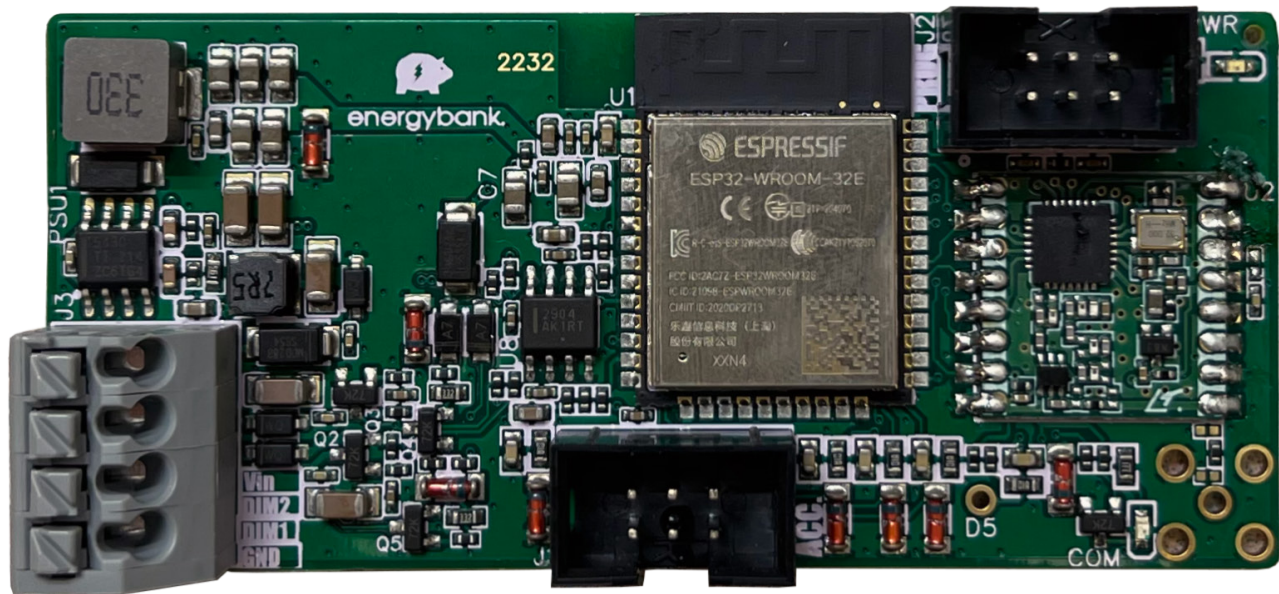
Our expandable technology platform starts with our Dynamic Motion controls that are designed to deliver the maximum savings while enhancing the workplace environment. Our platform can easily be expandable to include monitoring of an unlimited amount of mission critical processes throughout the facility reporting non-compliant data points from nearly every type of analog sensor 0-10 Volt, 4-20 milliamp or a multitude of digital sensors.

Key Capabilities

- Easy customization – quickly set up energy-saving behaviors that comply with energy conservation requirements, including demand response and daylight harvesting.
- No special server required — forget expensive, complex hardware, or additional IT equipment.
- Multiple methods of control — flexible deployment models allow stand-alone local and secure access.
- Scalable solution — integrate seamlessly into existing BMS systems and support large deployments with cloud-based architecture.
- Works both indoors and outdoors — no need for separate control systems.
- Streamline commissioning — with project management services and built-in tools within the software, have the customer's lighting network up and running quickly.

*Commission-less in some applications.

Genius IoT®

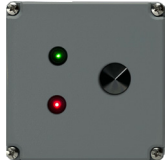


- Protocols to include 915 MHz, Bluetooth®, Wi-Fi and MQTT
- Demand Response
- Line-of-sight: Up to 1000ft w/o repeater
- Master Building Switch
- Operating Temperature: -40 to 85° C
- Zone Override
- Multi Setpoint Zonal Motion Control
- Power Supply: 12-24V
- Thermal Foldback Capabilities
- Voltage Range: 120-277V

915 MHz Wireless Transceiver/AES-128 Encryption

When compared to the 2.4 GHz Bluetooth® or Wi-Fi devices, our 915 MHz will easily out perform the 2.4 GHz Bluetooth®, and Wi-Fi in real world applications with it's longer range, unmatched ability to penetrate through building structural obstructions. The Genius IoT® controller performs frequency hopping on 50 channels with continuous self diagnostics sending out a heartbeat at 2 minute intervals. In the event of a communication failure the controller features Fail-To-On as the standard sequence of operation.

Product Line



Industrial



Office/
Classroom

Wireless Dimming Controller with S.A.S. Emergency Button

Our Wireless Light Dimming Controllers allow users to easily adjust their lights to the desired light level set point. Commercial application includes our S.A.S. Emergency button. 0-10V Dimming



Industrial Vibration/Temperature Sensor

Features a 33lb magnetic quick connect sensing element that samples the 3 axes, 1500/second. Requires connection to our Fusion Dashboard.



Industrial Power Sensor

Basic Option: 120-480VAC current with voltage stipulated.
Option 2: 120-480VAC. >415 Volts requires neutral.

Both options require connection to Fusion Dashboard with monthly monitoring fees apply.



Exterior Photocell

Providing configurable setpoints for the fixture to turn on or off. Fixture will continuously dim with changing ambient light between the on and off setpoints.



Wireless Office Sensor

Instantly detects motion within an office to turn on lights. Turns off lights when motion is not detected.

Accessories

Seamlessly integrate our line of Genius IoT® Motion sensors and EnOcean compatible accessories to any LED fixture.



Standard PaPIR Sensor



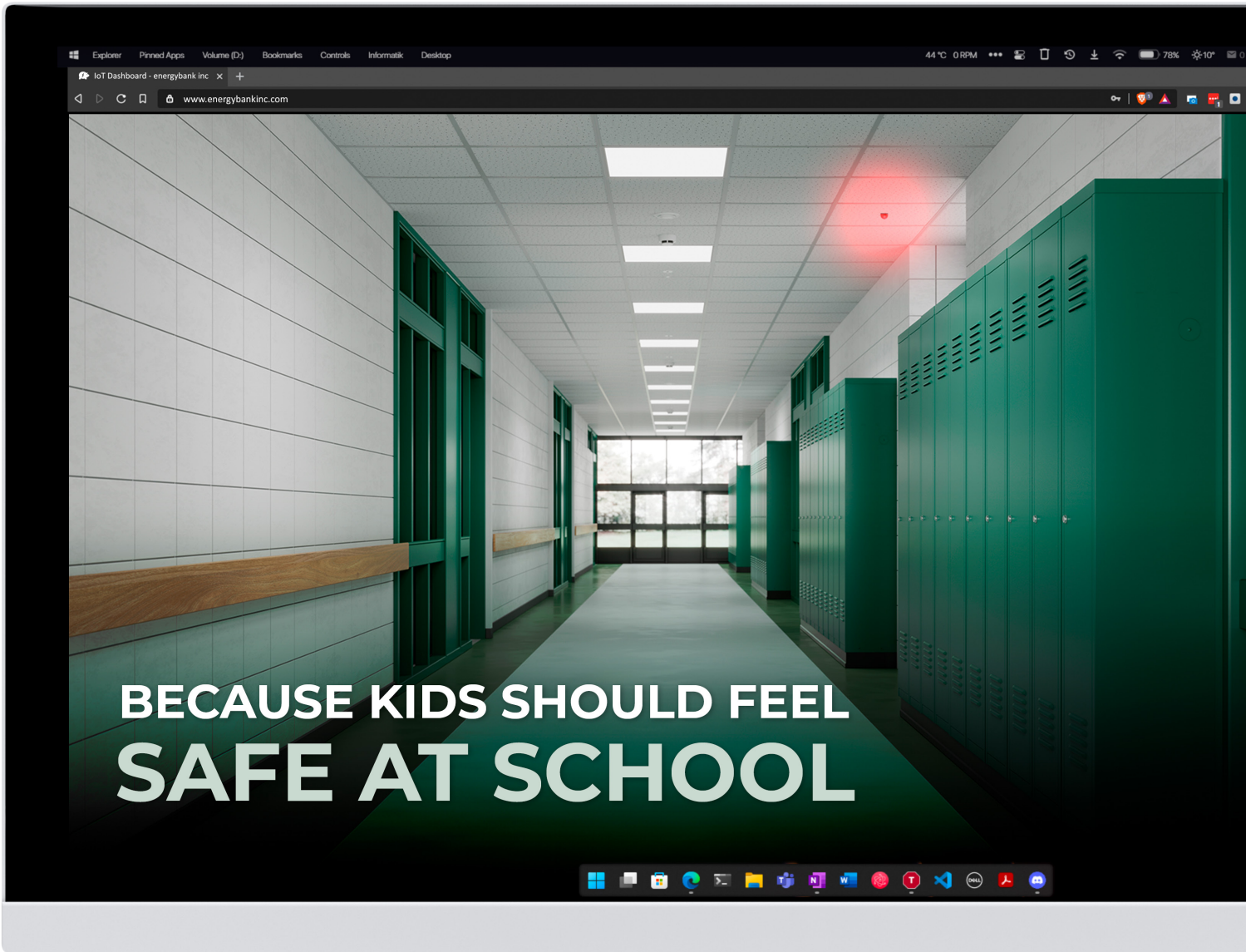
Sharkward Motion Sensor



EnOcean White Goods

*Specifications and design are subject to change without any notice or obligation on the part of the manufacturer.

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Wireless Dimming Controller with S.A.S. Emergency Button

Our Wireless Dimming Controller is the ultimate solution for creating a safe work or learning environment, with optimal lighting control and an S.A.S. (Safe at School) emergency button all in one device, ensuring peace of mind for employees and students alike.



Grid Level Demand Response

Genius IoT® Grid Level Demand response provides an opportunity for our consumers to play a significant role in the operation of the electric grid by reducing or shifting their electricity usage during peak periods in response to time-based rates or other forms of financial incentives.

Interior Lighting

- Dynamic Motion Control
- Peak Demand Control
- Demand Response (LoRa/Cellular/MQTT)



Exterior Lighting

- Optimum Start/Stop
- Peak Demand Control
- Communication Agnostic (LoRa/Cellular)





Motion Control

Digital Ceiling Canopy

The energybank Genius IoT® Wireless controls can be retrofitted to any LED fixture with 0-10V dimming and 12-24V auxiliary power. Once energized, the devices will automatically discover and connect with other Genius IoT®-enabled devices for a dynamic motion control system creating a Digital Ceiling Canopy.

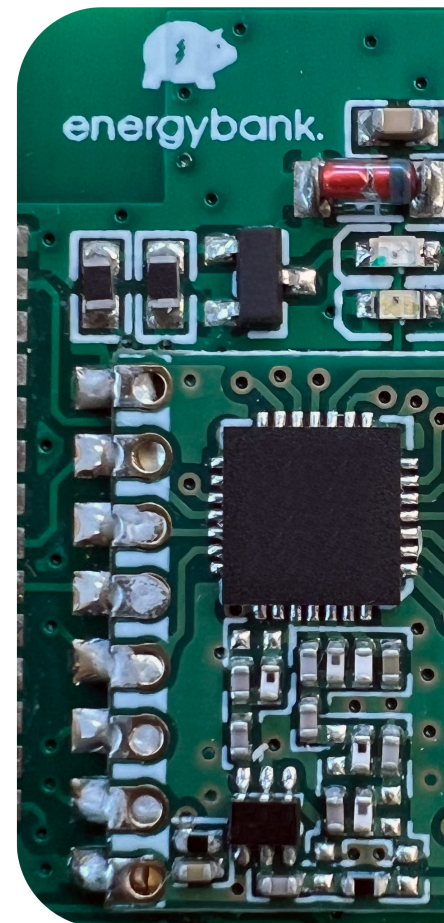
Features

- 4 Level Motion
- Individual Fixture Power Consumption
- Zone
- Building
- Dynamic Timeout

Minimum 30 second interval with additional second added per second of occupancy

Expandable Platform

- Photovoltaic Solar Direct Drive to LED Lighting System
- Demand Response
- Zone/Building Override



Exterior Lighting

Capabilities

model T[®]

Peak demand fluctuates given the variable output of renewable energy assets. A demand response command is sent wirelessly when grid operators call for additional short-term capacity.



Digital Moat

Security Sensor/Monitoring

- Valuable assets can be protected by creating a change of state to discourage intruders from entering secured area.

EV Charging

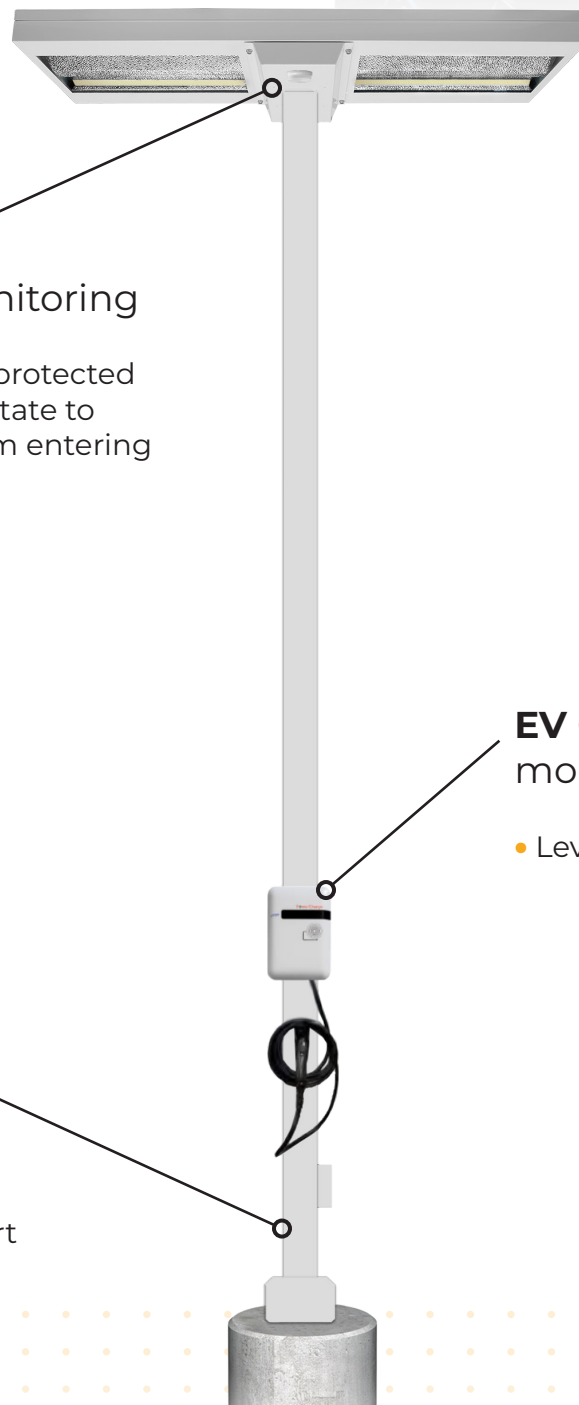
model T[®] Pole Base

- Level 2-3 - 240V-480V EV Charger

Remote Driver

Pole Skirt

- Remote driver located above pole base/and or base skirt to feed EV Charger





Power storage **made easy**
with ENERGYbank®

Specifications

ENERGYbank® is an integrated battery system that stores your solar energy for backup protection, so when the grid goes down your power stays on.

Energy Capacity

15.2kWh*

On-Grid Power

5.8kVA continuous

Backup Power

10kW peak
106A LRA start
Seamless backup
transition

Size and Weight

L x W x D
45.3 in x 29.6 in x 5.75 in
251.3 lbs

Installation

Floor or wall mounted
Indoor or outdoor
-4°F to 122°F
Water and dust resistance



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11:10 11:15 11:20 11:25 11:30 11:35 11:40 11:45 11:50 11:55 12 PM 12:05 12:10 12:15 12:20 12:25 12:30

energybank Main Panel Data

Basis for Data	Real Time AC Wattage	Annualized kWh	Annualized Cost	Annualized CO2 Emissions
Current Values	9.16 kW	80,245 kWh	\$7,061.56	38.28 tons
Averaged Values from Selected Time Range	8.33 kW	73,013.9 kWh	\$ 6,425.22	34.83 tons

2 Hour Metered Data - energybank



Types of Meters In Real Time

<p>AC Power</p> <p>energybank Main Panel</p> <p>Power: 9.16 kW</p> <p>Watts: 9.16 kW Volts: 122.3 V Current: 74.87 A</p> <p>Cumulative kWh since 08/18/22: 92,547 kWh</p>	<p>DC Power</p> <p>Classroom Mini-Skylight</p> <p>Power: 10.21 W</p> <p>Watts: 10.21 W Volts: 41.09 V Current: 0.25 A</p>	<p>Light Level (Footcandles)</p> <p>Engineering Lab</p> <p>Light Level: 73.3 fc</p> <p>74.4</p> <p>73.3</p>	<p>Motion</p> <p>Engineering Lab</p> <p>13.6% Activity</p>	<p>Temperature and Humidity</p> <p>Engineering Lab</p> <p>Temperature: 72.6 °F Humidity: 44.4 %</p> <p>72.6 °F 44.4 %</p>	<p>Vibration</p> <p>Air Handling U</p> <p>Z Axis 1st Frequency, Magnitude Total Magnitude: 62 mG</p> <p>Z Axis Frequency and Magnitude</p> <p>66.5</p>
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Note: All values can also have their maximum, minimum and average values displayed.



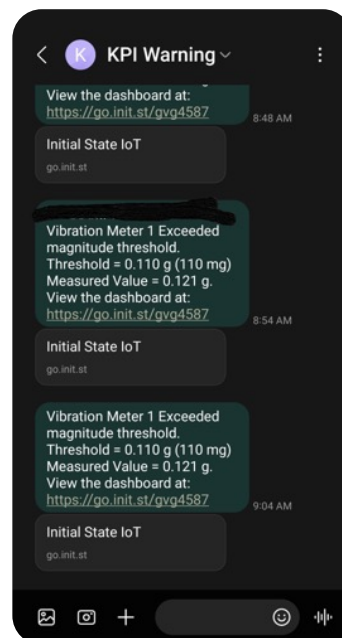
Key Features

Visualization Dashboard

Powered by Amazon AWS, The FUSION Visualization Dashboard lets businesses view and archive real time data while automatically messaging key performance indicators that are vital to your operation. Project performance can be verified with revenue grade metering.

Metering Capabilities

- Electric Usage
- Temperature
- Pressure
- Humidity
- Process Equipment



Alarms for Critical KPI's can be sent via email/text message.



energybank is a distributed energy resource company specialized in developing and integrating Award-Winning, High-Performance LED, Solar-Powered LED, Advanced Controls and IoT devices.

To learn more, call or
visit: energybankinc.com
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