

## LIGHTWORKS® Product Family

In any industry, high power, rapidly deployable lighting solutions for emergency and planned maintenance activities enhance safety, facilitate recovery, and optimize productivity for first responders and technicians. Dependable, resilient and flexible lighting deployments are essential to mitigating the impact of both unplanned and planned lighting disruptions. The BlackStarTech® Lightworks family of lighting delivers two separate series of emergency and maintenance lighting solutions that meet and exceed emergency and regulatory facility lighting requirements.

### Applications

Educational  
and Research Facilities

Medical  
and Healthcare

Facility Resiliency Solutions

Emergency Response

Chemical Plants  
and Refineries

Utilities

Nuclear

Industrial

Law Enforcement

Telecommunications  
and Data Centers



#### BlackStarTech Lightworks iSentient Series

smart emergency lighting devices provide advanced LED lighting, state-of-the-art battery technology, self-diagnostic testing of both battery and performance monitoring health, as well as providing a platform for Internet of Things (IoT) connectivity and communications. With this suite of technology-enabled lights, you can remotely manage and maintain your smart emergency lighting across your facility, automate surveillances, minimize maintenance and reduce lifecycle costs.



#### BlackStarTech Lightworks BrightSites Series

products provide industrialized, rapidly deployable, highly reliable battery uninterruptible power source (UPS) lighting solutions. The BrightSites Series offers lighting options in many sizes, from a compact advanced handheld LED lightpack, to our rugged mobile light towers and stadium trailer lighting that can be used to support industrial facilities with various maintenance, shutdown, outage, and emergency applications.

Unlike offerings from competitors who use lead acid batteries that are expensive and difficult to maintain, the Lightworks iSentient Series and BrightSites Series leverage Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries, which are 50% lighter, have much greater energy density, a 3X longer life expectancy and are more environmentally friendly.

Lightworks iSentient Series and BrightSites Series products can be used in a variety of applications for educational facilities, law enforcement, road construction, building construction, warehousing, special events, hospitals, nuclear facilities, industrial plants and in other demanding environments.

## Lightworks iSentient Series Smart Emergency Lighting and Lightworks BrightSites Series Flexible Lighting Solutions

### Lightworks iSentient Series Features

Up to 24-Hour LED run time (3x longer lasting)

Increased reliability using  
Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries

15-year expected battery lifespan

Predictive self-diagnostics

Remotely monitor health and performance of  
all devices with real-time communication updates

Cyber secure operation prevents hackers  
from impacting the device

### Lightworks BrightSites Series Features

Configurable up to 48-Hour LED run time and can be  
integrated with long term power capabilities with a  
compact, environmentally friendly propane generator

15-year expected battery lifespan /  
15,000 rechargeable battery cycles

Increased reliability using  
Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries

Acts as a UPS running on  
alternate low current 110VAC  
or integral propane generator

### LiFePO<sub>4</sub> Batteries: Superior To Your Current Battery

Both the iSentient Series and BrightSites Series use LiFePO<sub>4</sub> batteries, which are safe, reliable, and more environmentally friendly than lead acid batteries. While the internal battery management system (BMS) performs advanced self-diagnostics to protect the battery, the chemical make-up allows the battery to maintain an expected lifespan of 15 years, which is significantly longer than lead acid. This means fewer battery replacements, less downtime, and increased reliability.

The internal battery management system optimizes functionality and safety. The system monitors battery health including cell voltage, maximum charge and discharge current, overvoltage, overcurrent, temperature, cell balancing, short circuit, and more. The battery management system takes protective actions to improve reliability and safety using notification alarms through data communications or by automatically disconnecting the battery. Temperature-sensing self-diagnostics eliminate the possibility of dangerous temperature ranges for the battery, avoiding thermal runaway.

Standard emergency lighting devices often use antiquated lead acid batteries that need to be replaced every 3 to 5 years. Additionally, they often require weekly and monthly manual validation checks, experience frequent failures, and can incur expensive repairs. As for the iSentient Series, the utilization of LiFePO<sub>4</sub> batteries delivers significant maintenance cost savings due to their lifespan and little to no maintenance required through its automated self-diagnostic and surveillance function. It's estimated that a customer could redeploy up to 2 full-time equivalent employees and save up to \$150,000 in annual materials and maintenance costs when switching their emergency lighting to the iSentient Series.

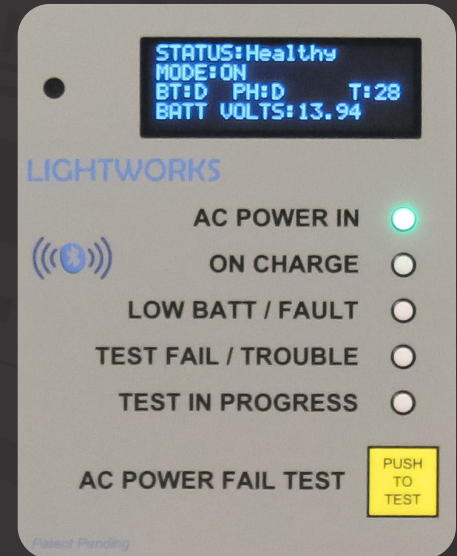




## Lightworks iSentient Series Smart Emergency Lighting

The iSentient Series smart emergency lighting features self-diagnostic predictive and communication notification software. The predictive software combined with the excellent battery life provides the ability to remotely manage and communicate issues immediately to key individuals for increased awareness and the ability to respond. This helps maintain smart emergency lighting across your facility, minimizing inspections and reducing maintenance and lifecycle costs, while improving reliability.

iSentient Series' Internal Control System firmware code, Single Board Computer Communication Software, Terminal Software Program and Bluetooth Application technologies perform technical tasks that provide cyber-compliant data output, device performance details and control of ancillary optional functions. This type of intelligence coupled with the LiFePO<sub>4</sub> battery and rugged portability, makes the iSentient Series the most desirable line of smart emergency lighting on the market.



## Lightworks BrightSites Series Flexible Lighting Solutions

The BrightSites Series offer flexible lighting solutions that are lightweight, yet rugged, transportable, and easy to use. These products run on batteries, so you don't have to deal with fuel, diesel, spillage, or berm kits. The battery powers the lights and also acts as an uninterruptable power supply when needed. This gives you the added capability to plug in tools or instruments increasing flexibility and usefulness.

BrightSites Series lights are easy to deploy, saving you significant hourly costs for workers compared to the utilization of competitive solutions that may involve labor-intensive installation of temporary lighting in high places.

Long run times on the BrightSites Series in battery mode enable portable implementation situations that get rid of external power or fossil fuel sources, removing the cost of dealing with fuel spillage or berm kits.

BrightSites Series lights are cost-effective to purchase, making it feasible to own your portable lighting solutions, as opposed to paying for costly rentals.



## Products in the Lightworks Family

The BlackStarTech Lightworks family of emergency and maintenance lighting are powered by state-of-the-art LiFePO<sub>4</sub> batteries with built-in battery management system to ensure everything stays balanced.

### iSentient Series

The iSentient Series provides smart emergency lighting with cyber-compliant technologies that sets a new standard for deploying smart emergency lighting across your critical infrastructure and facilities. The predictive software combined with the excellent battery life provides the ability to remotely manage and communicate issues immediately to key individuals for increased awareness and ability to respond. This helps maintain smart emergency lighting across your facility, minimizing inspections and reducing maintenance and lifecycle costs, while improving reliability.



iSentient Series



iSentient Shot Detector Series



iSentient Flame Detector Series



iSentient Smoke Detector Series



## BrightSites Series

The BrightSites Series provides portable lightpacks and light towers for commercial and municipal customers who need equipment that is rugged, highly reliable, cost-effective and easy to use. Configurable up to 48-Hour LED run time, BrightSites Series products can act as an uninterruptible power supply and can be integrated with long term power capabilities using a compact, environmentally-friendly propane generator, our Defender Generator Series. The combined battery power and low maintenance propane generators minimize maintenance, improve reliability, eliminate hazards with EPA spill kits required for gas or diesel fuel, and support a lower carbon footprint.



BrightSites Legionnaire Lightpack

BrightSites Legionnaire Light Tri-Tower

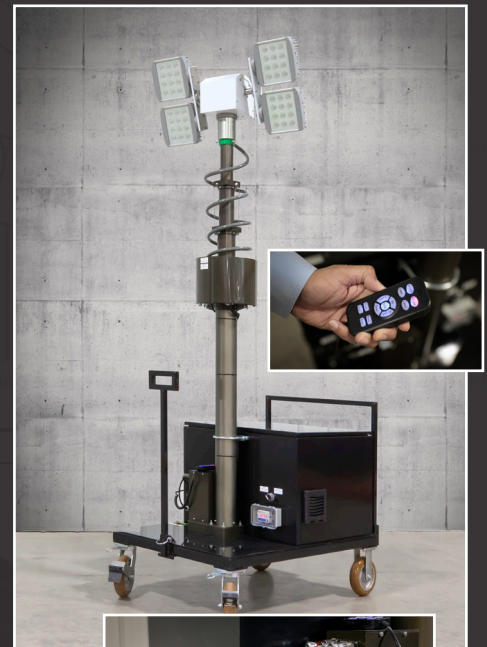


BrightSites Leviathan Light Tower Extreme



BrightSites Leviathan Light Tower Extreme - RETROFIT

BrightSites Leviathan Light Tower



For more information on standard or customized products, contact us at 1-844-585-6439 and [info@blackstartech.com](mailto:info@blackstartech.com).

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