

Elevate Your Facility with Stellar Lighting Systems X-Series and X-Linear

Transform your industrial or commercial space with the Stellar Lighting Systems X-Series and X-Linear—where ground-breaking technology meets unparalleled efficiency. This innovative lighting line reduces energy costs while delivering brilliant, reliable performance. Say goodbye to uneven lighting and frequent maintenance, and embrace a safer, smarter, and more sustainable solution. With Stellar, you're not just lighting a space—you're investing in a brighter, more secure future for your business.

Customized for Sustainability: Designed to maximize each project's sustainability and resiliency goals, the X-Series and X-Linear offer tailored solutions for long-term performance.

Innovative Design: The X-Series features a cutting-edge distributed lighting system that evenly spreads light across spaces, eliminating dark spots while keeping LEDs cooler to extend their lifespan and reduce maintenance costs. The X-Linear upholds the same high standards of quality and efficiency. Using the same advanced technology but with a form factor optimized for aisleways, it ensures versatile performance.

Circular Economy Construction: Crafted from 80% recycled plastics and aluminum, re-alloyed to Al-6065 and heat-treated, with an anodized natural aluminum finish for durability and longevity.

Onboard Wireless Control Module: All X-Series and X-Linear lights come standard with our Onboard control module for remote control and dimming. Optional add-ons include motion sensing, smart cameras, air quality monitoring, and more.

Advanced Illumination: Delivering consistent, high-quality illumination, the X-Series and X-Linear enhance visibility and safety, creating well-lit environments proven to deter illegal activities and protect employees, customers, and guests.

Extreme Energy Efficiency: With an impressive output of up to 245 lumens per watt, the X-Series and X-Linear maximize energy savings, optimizing efficiency without compromising performance.

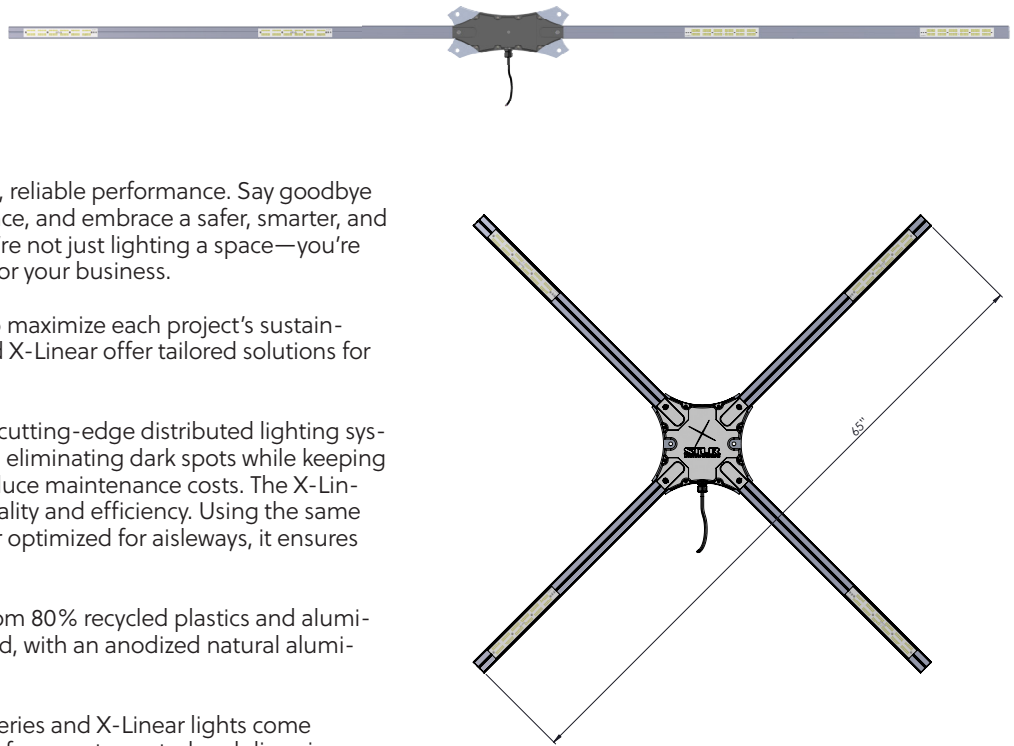
Versatile Configurations: Designed to adapt to various industrial and commercial needs, the X-Series and X-Linear offer flexible solutions that provide long-term cost savings and superior lighting tailored to your space.

Installation: Luminaires can be surface-mounted or hung via unistrut (or similar) with a threaded bar for easy installation.

Listings: Updated upon final design. All configurations are UL/C-UL listed to US and Canadian safety standards, wet location listed, and rated IP66. Designed for use in ambient temperatures ranging from -40°C to 85°C when suspended 18 inches from the ceiling.

Warranty: The product comes with a 5-year limited warranty, which is the only warranty provided. No other statements in this specification sheet create additional warranties, and all other express or implied warranties are disclaimed.

Note: Actual performance may vary depending on the end-user environment and application. All values are design or typical, measured under laboratory conditions at 25°C. Product images are for illustration purposes only and may not exactly represent the product. Specifications are subject to change without notice.



230+
LUMENS PER WATT



SDG 7: Affordable and Clean Energy

By producing highly efficient lighting solutions (at least 200 lumens per watt), we reduce energy consumption and promote the use of clean, affordable energy in commercial and industrial settings.



SDG 9: Industry, Innovation, and Infrastructure

Our focus on innovative lighting design and advanced technology ensures that businesses and public infrastructure benefit from smarter, more efficient lighting systems that support sustainable industrial growth.



SDG 11: Sustainable Cities and Communities

By providing energy-efficient lighting for urban areas such as parking garages and warehouses, we contribute to safer, more sustainable cities with lower energy costs and improved public safety.



SDG 12: Responsible Consumption and Production

We prioritize sustainability by using 80% recycled materials in our products, reducing waste, and promoting the circular economy in the lighting industry.



SDG 13: Climate Action

Our energy-efficient lighting systems help reduce CO2 emissions, contributing to the fight against climate change by minimizing environmental impact in commercial and public spaces.

TECHNICAL SPECS

ONE TECH STACK, MANY USES

Customizable to any height.

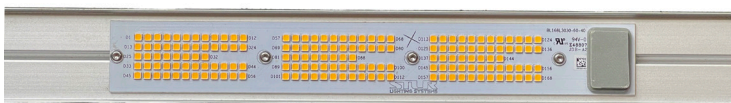
STLR-X40 Highlights

Wireless Controls Standard:

Programmable control unit. Dimmable, On-Off, Motion-activated in zones or individual.

Advanced LED Protection:

At Stellar, we take LED protection a few steps further so our LEDs stay vibrant with our advanced passive thermal management and advanced conformal coating. Our aluminum arms double as heat sinks and optimized PCB designs keep temperatures low, while a durable, transparent polymer coating shields the phosphor from moisture, chemicals, and wear. This prevents phosphor loss, ensuring consistent, high-quality light without ever turning blue.



Servicable:

In the rare case of PCB failure, our arms are hot-swappable with just one screw, making maintenance and service easy and keeping the luminaire out of the trash.



X40 & X-Linear - Recommended Spec

Driver	LM	LM/W	CRI	CCT	LED Lifespan	Driver Lifespan
U-100W	24,216	242	80	4000 or 5000	120,000 hrs	110,000 hrs
U-150W	33,358	230	80	4000 or 5000	120,000 hrs	110,000 hrs

Power Options

Driver	V	W	PF	IP	Max Operating Temp	Controls	Certs
U-100W	100-277 VAC	100W	0.99	IP67	85°C	0-10V - Wireless	UL Class P
H-100W	249-528VAC	100W	0.96	IP67	70°C	0-10V - Wireless	UL Class 2 LED
U-150W	100-277 VAC	100W	0.99	IP67	85°C	0-10V - Wireless	UL Class P
H-150W	249-528VAC	100W	0.96	IP67	70°C	0-10V - Wireless	UL Class 2 LED

BUILT-IN INTELLIGENCE

STELLAR CONNECT

Stellar Wireless edgeAi Control:

A smart, sustainable solution revolutionizing intelligent urban and facility lighting. This cutting-edge system integrates real-time diagnostics and management for the entire line of Stellar Luminaires, powered by AI-driven maintenance and energy optimization. Featuring the Stellar X Series high-efficiency luminaires, AI-powered smart modules, surveillance cameras, air quality monitoring, and a robust Stellar Intelligence, Stellar SLS delivers unmatched efficiency, safety, and environmental benefits. We're taking our already green infrastructure and making it smarter for the future.



Stellar Control Transmitter/Receiver

Options include:

Maximum Load: 1000W, 1800VA, 15A max switching

Dimming Load: 0-10V or DALI dimming sinc or source operation

Occupancy Control: Supports wireless, active high occupancy sensors.

Surge/In-rush: LED protection with TRIAC assisted relay, 1080J/36kA

IP Rating: IP66

Temperature Rating: -40° to 70° C ambient

Operating Voltages: 120-277VAC or 347/480VAC

Frequency: 50/60 Hz

RF: Transmit Power 900MHz: +20dBm, Max 1000ft Clear LOS; 2.4GHz:

+10.4 dBm,

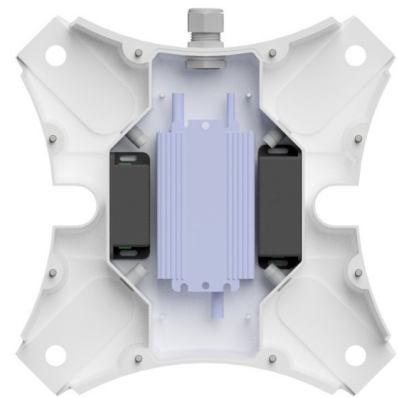
Max 100ft Clear LOS

Wireless: Standard 900MHz: IEEE 802.15.4-based

2.4GHz: Version 4.0+ of the Bluetooth specification

Regulatory Compliance: Wireless: FCC, IC, IFETEL

Safety: cULus 773, RoHS, NOM



Installation:

Flush Mount Kits:

Concrete: 2, 1/2" tapcons with washer.

Flush Beam Mount: 3" lag Bolts with locking washers.



*image shown may be older model, or preproduction model

Suspension Mount:

Unistrut Adapter Kit: Adapter, Bolts and locking washers.

***Must use threaded rod.**



*image shown may be older model, or preproduction model

Installation Instruction Videos and Online Classes:

Our lights stand out with innovative design and superior efficiency, and because we understand their unique qualities, we provide free installation training videos and online sessions to ensure seamless setup and maximum performance.

PERIPHERALS

Integrated and Stand Alone Sensors

Stellar IOT Gateway & Control

Stellar's LoRaWAN Gateway is where all the peripherals are connected wirelessly via LoRaWAN protocols. LoRa allows for connectivity over long distances and each Gateway can connect and control up to 2000 devices: Lights, Sensors, Controls, Etc.

Unit Price: \$1250

Technical Data

Processor	MT7628(MIPS24KEc@580MHz)
RAM	DDR2 128MB
Flash	32MB
Long Range Gateway Chip	SX1302
Channel	8
LoRaWAN Protocol	V1.0.3 Class A/Class B/Class C
Frequency Plan	US915
Wi-Fi	Support 2.4 GHz 802.11 b/g/n
Ethernet	1xRJ45 (10M / 100 M), PoE PD support
Operating Temperature	-20°C to 55°C
Relative Humidity	0% - 85% (non-condensing)

Stellar EDGE Ai HUB

Stellar Control is intergrated with iterate.ai's Frontline Camera Visions System. Each HUB can connect up to 15 cameras giving full, Ai coverage of any location. Monitor safety incidents, flag missing inspections, and ensure compliance logs are completed automatically through AI-driven reminders and analytics.

Unit Price: \$3500

Technical Data

Processor	EDGE Ai
RAM	DDR2 128MB
Flash	32MB
Conection	Ethernet to Stellar Gateway
Operating Temperature	-20°C to 55°C
Relative Humidity	0% - 85% (non-condensing)



BOSCH 4 in 1 Environmental Sensor

From BOSCH: A dog's nose has up to 220 million olfactory cells. Sniffer dogs have an incredible nose and can even sniff out forbidden substances. Inspired by the animal's super-sensitive organ, the BME690 detects spoiled food or bad breath, for example. The BME690 is further developed on BME688, with increased robustness for use in environments with high condensation levels. It can measure gas, humidity, temperature and air pressure simultaneously and is the world's smallest 4-in-1 air quality sensor (3.0 x 3.0 x 0.93 mm3).

Use Cases:

- Indoor Air Quality Detection
- Food Freshness Detection
- Humidity Control & Automation
- Manufacturing Safety



X-Light Integration: \$25

Stand Alone Unit: \$45

Technical Data

Gas sensor	
Sensor-to-sensor deviation (IAQ)	± 15% ± 15 IAQ
IAQ Operating modes	3 sec (LP) and 300 sec (ULP)
Major sensor outputs	Index for Air Quality (IAQ), bVOC- & CO2-equivalents (ppm)
Humidity sensor	
Response time	1 s (r0-63%)
Accuracy tolerance	± 3 % relative humidity
Hysteresis	± 1 % relative humidity
Pressure sensor	
Relative Accuracy	±0.05 hPa
Absolute Accuracy	± 0.5 hPa
Temperature coefficient offset	±1.3 Pa/K (equiv. to ±10.9 cm at 1°C temperature change)
Temperature sensor	
Absolute accuracy	±0.5 °C (0-65°C)

SOFTWARE

Control and Monitoring

Stellar Control

All Stellar Lights and Sensors come standard with open source wireless capabilities. Locally Hosted or Cloud based offers tight security and local control regardless of connectivity.

Capabilities:

- Assigning and controlling zones.
- Individual light control - on/off/motion/dim
- Monitor Air Quality Levels
- Monitor Energy Consumption and Efficiency
- Add any LoRa IOT device and collect data*

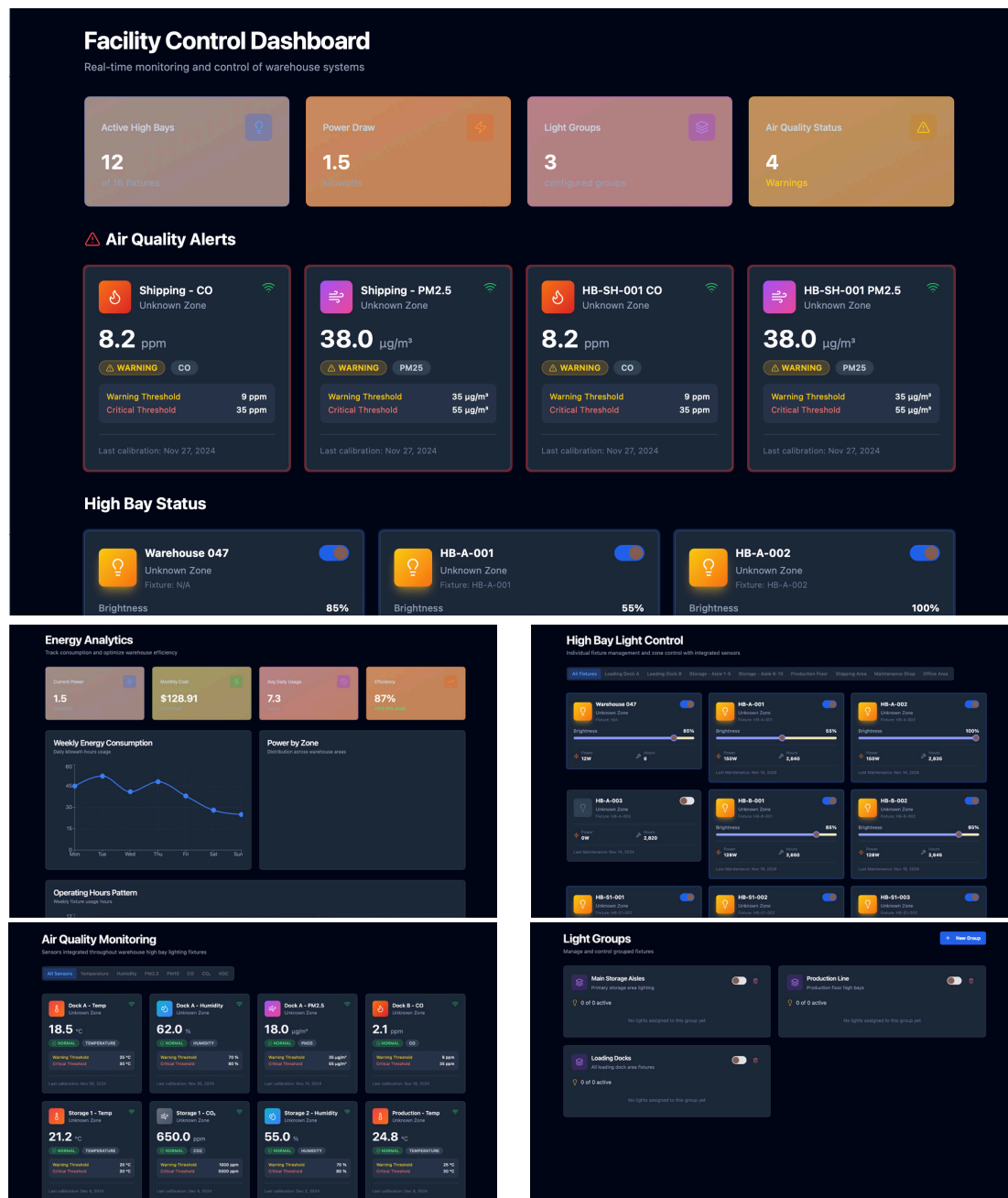
Options:

Locally Hosted: Included with Stellar IOT G&C

Stellar Cloud:

1-49 devices: \$99/mo flat rate
50+: \$1.50 per device per month

3rd Party Device integration and setup: \$150-500
Custom IOT Device Design and Certification: Starting at \$1000



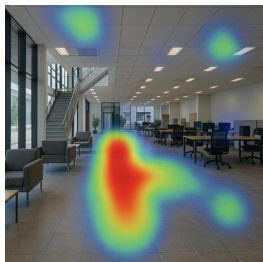
Hard Tech Ai

Intelligent Infrastructure

Stellar Intelligence intergrated with Frontline

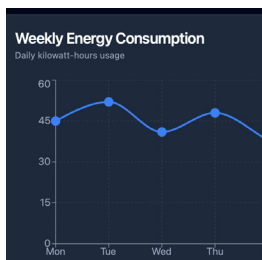
Frontline integrates directly with Stellar Control and Hardware to create an easy, affordable Warehouse Intelligence platform designed to increase safety, security, automation and enhance energy savings through on-site edgeAi processing.

Capabilites



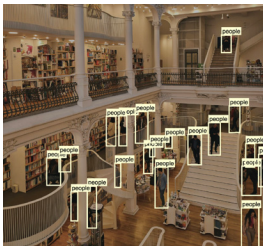
Occupancy Detection:

Frontline Vision continuously monitors occupancy levels in each area of the building using computer vision. Based on real-time people counts and movement patterns, Frontline's AI dynamically adjusts lighting, HVAC, and power settings to optimize energy usage without compromising comfort or safety.



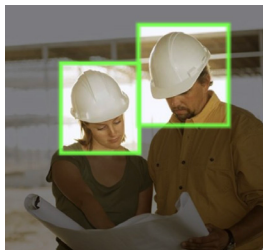
Energy, Ventilation, and Air Quality Optimization

Frontline Vision uses computer vision to monitor occupancy and adjusts lighting, HVAC, and power settings for energy efficiency while maintaining comfort. Integrated air quality sensors track CO2, particulate matter, and VOCs, enabling the AI to optimize ventilation and air purification for better health and energy savings.



Security Compliance

Monitor safety incidents, flag missing inspections, and ensure compliance logs are completed automatically through AI-driven reminders and analytics. The system also provides real-time analytics to identify patterns in safety incidents, enabling proactive measures to enhance workplace safety and ensure regulatory adherence.



Safety Compliance

Using AI-powered computer vision, the system identifies potential hazards such as spills, obstructions, smoke, or exposed electrical equipment. It also verifies that workers follow safety protocols, ensuring required personal protective equipment (PPE) like hardhats, vests, or gloves is worn in designated zones.

Options:

Up to 15 Cameras:

Stellar EDGE Ai HUB: \$3500

Frontline Ai Subscription:

Up to 15 cameras: \$150/mo flate rate

Need more coverage? Simply add another kit. Volume pricing available.