

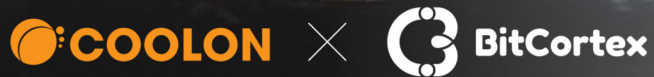
An aerial photograph of a large industrial facility, possibly a refinery or chemical plant, with numerous storage tanks, pipes, and structures. A semi-transparent blue network of white lines and nodes is overlaid on the image, connecting various points across the facility, symbolizing a connected system or data network.

# BRILLIANT CONNECTED LIGHTS



BitCortex

**Digitize and future-proof  
your site through an essential  
prerequisite – lighting.**





Brilliant Connected  
Lights by Coolon



# How

All that is needed to implement digitization on any massive, complex mining or industrial sites is to choose **Coolon Brilliant Connected Lights** throughout the plant.



### **/ Robust Lights as a Digital Backbone**

Coolon lights are fitted with smart networking nodes inside. Always powered on, elevated, routinely inspected and densely scattered around the site, lights are the perfect host for network transmitters.

### **/ Wireless Mesh Network for Countless IoT Services**

This robust mesh network acts as a digital backbone for the site and enables effortless deployment of a wide range of IoT based sensors and services like asset tracking, personnel locating, machine condition monitoring and many more.

### **/ Automatic Immediate Connection**

Once powered, the lights automatically mesh together to create a wireless network across the whole site, each light continuously detecting and reporting on any surrounding activity or important environmental changes. The complex process of digitisation comes down to flipping a switch.



# Benefits

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## / Unlimited Value

Coolon Brilliant Connected Lights provide a backbone for thousands of emerging ground-breaking IoT services and technologies, enabling customers to pick and choose whatever provider suits their particular needs the most. Coolon took an approach to create an AppStore-like environment for various IoT service providers to roll out their technologies without the need to worry about the physical challenges of connectivity.



**AUTONOMOUS EMERGENCY  
LIGHTING REPORT**



**LIGHTING  
CONTROLS**



**TOOL  
TRACKING**



**PERSONAL  
MONITORING**



**EMERGENCY  
ROLL CALL**



**ASSET  
TRACKING**



**MACHINE CONDITIONING  
MONITORING**



**PRESSURE  
MONITORING**



**TEMPERATURE  
MONITORING**



**FLOW  
MONITORING**



**GREASE  
MONITORING**



**GAS  
MONITORING**

ENHANCE **SAFETY**





## **/ Visual Emergency Status Propagation**

Emergency status alerts such as lightning proximity or evacuation can be propagated through the lighting network in real-time across the site with built-in colour-changing visual warning indicators. In case of an emergency, the warning indicator will switch to a pre-defined flashing colour pattern, alerting the personnel of a specific emergency status and making sure no one is caught unaware.

## **/ Personnel Locating**

Brilliant Connected Lights make it possible to instantly account for everyone on site, locating missing workers and sending help directly to those in need in case of an accident. The mesh network created by the lights enables real-time visibility into areas without the need for GPS, mobile or CB radio coverage, ensuring the safety of all site personnel, even in the most secluded areas of the facility.



## **/ Every Light is an Emergency Light**

Every single light is equipped with a battery, providing the power backup for both lighting and networking functions, ensuring a safe and smooth evacuation process in case of a power outage. Superior illumination uniformity and a reduction in shadowing also enhance hazard perception and visibility, maximising the safety and efficiency of the evacuation process.

A night-time photograph of an industrial facility, possibly a power plant or refinery, with various structures, pipes, and walkways. The scene is illuminated by artificial lights. Overlaid on the image is a network of thin, light-blue lines that connect various points across the facility, suggesting a data or communication network. In the lower right, a worker in a yellow shirt and white hard hat is visible near a blue structure. A semi-transparent black box with a location pin icon and text is also present in the lower right.

INCREASE **EFFICIENCY & SPEED**

623-SCR-101  
COARSE  
SCREEN



ELECTRICIAN  
LOCATION  
WASHER LEVEL 2

## / Machine Condition Monitoring

A range of inexpensive, battery-powered sensors enable real-time condition monitoring of many critical machines around the site. This helps maintenance engineers find early warning signs of oncoming malfunctions and allows them to schedule preventative maintenance, and eliminate unexpected, costly downtime.



## / Site-wide Audit Trail

Every fitting is built in with an array of different sensors, constantly monitoring any surrounding motion activity or important environmental changes, automatically generating detailed reports available to the site management through a secure online portal. This site-wide audit trail allows management to derive higher value, identify patterns and trends and maximize their operation based on the collected sensor-based data insights.

## / Asset Tracking

The mesh network created by the lights offers the ideal backbone for asset tracking service providers to roll out their services with high accuracy and low latency. Gaining real-time site-wide visibility enables site management to instantly locate any tagged item anywhere on site, including indoors and underground, with relative precision, maximising asset utilization efficiency and productivity.

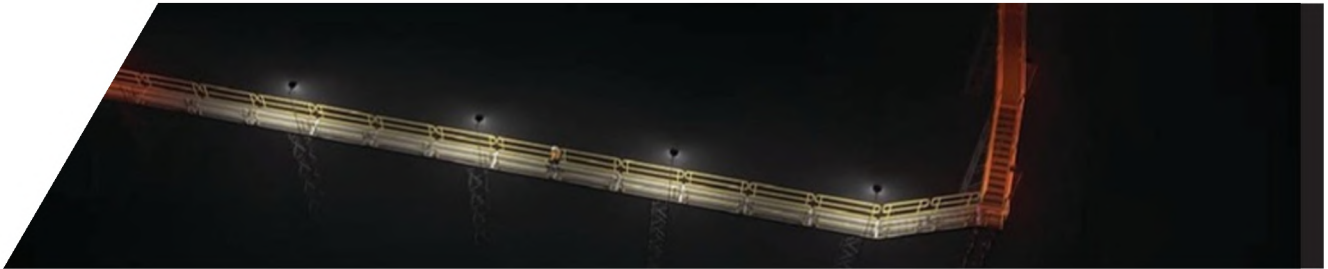






## / Dynamic Colour Change

A burdensome environmental challenge presented to many coastal facilities is the presence of local nocturnal wildlife, in particular nesting sea turtles. The bright white light normally used on sites is optimal for human vision and is a critical safety component on-site. Environmental regulations, however, require that amber-coloured lighting be used in order to reduce the disorientation effect on turtle hatchlings. Coolon Brilliant Connected Lights can balance the needs of humans and wildlife, being able to provide crisp white light for people, and automatically switch back to amber lighting to minimise disturbance on nocturnal wildlife when no people are detected in near proximity.





### **/ Over-the-Air upgradable**

As more functionalities are developed, over-the-air upgrades can be installed with a press of a button, enhancing the utility of lighting and the network every time. The only light in the world that gets better as time goes by.

# The Lights





**Meet the official range of Brilliant Connected Lights.**  
Whatever the application, we have the perfect fitting for you.



### **DLK3/TNR3**

True Smart Light

60W 4,800 – 6,550 lm



### **DLK2S/TNR2S**

First step to Brilliant Connected Lights

60W 4,526 – 6,180 lm



### **Aelita**

UltimateSmartLight

60W 7,240 / 5,310 lm



### **Blinky**

Visual Signaling System

40W



### **XINIX**

SmartBattenLight

50W 6,181 lm



### **EM Bulkhead 3**

Smart Bulkhead Light

40W



SCAN FOR FULL SPECIFICATIONS

# DLK3/TNR3

60W. Smart LED Conveyor/Area Light

## Brilliant, connected, beyond lighting

Fitted with a visual warning indication system to propagate any emergency status, equipped with the adaptive amber feature to combine environment friendliness with personnel safety and optimised for ultimate site safety with a prolonged emergency operation, DLK3/TNR3 is the way of the future.

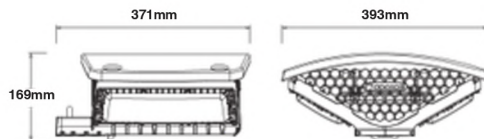
### Key Features

- Mesh Backbone
- Network Standby 24hrs
- Emergency Reporting
- Emergency Operation
- Digital Switch Off
- Amber/White Switching
- Warning Indicator Light
- Over-The-Air Upgradable
- Various CCT choices
- Variety of Optics available
- Remote Dimming

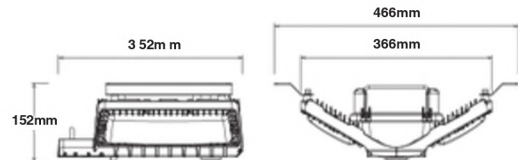
### Designed for

- Emergency lighting
- Stairwells
- Conveyors
- Tunnels
- Walkways
- Stacker/Reclaimer
- Bulkheads
- General Area Lighting
- Pedestrian Access Ways

DLK3



TNR3



Wirepas



DESIGNED & MANUFACTURED IN AUSTRALIA



SCAN FOR FULL SPECIFICATIONS



# DLK2S/TNR2S

60W. Smart LED Conveyor/Area Light

## Brilliant, connected, beyond lighting

Our iconic DLK/TNR range is now fitted with a smart wireless networking mode - with a perfect balance between performance, reliability and functionality, it's the perfect introduction luminaire to the world of Brilliant Connected Lights.

### Key Features

- Mesh Backbone
- Network Standby 24hrs
- Remote Dimming
- Over-The-Air Upgradable
- Quality uniform light
- High IP and IK ratings
- Various CCT choices
- Variety of optics available

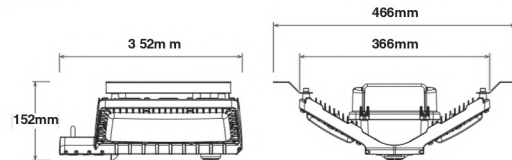
### Designed for

- Conveyors
- Emergency Lighting
- General Area Lighting
- Pedestrian Access Ways
- Stacker / Reclaimer
- Stairwells
- Tunnels
- Walkways

DLK2S



TNR2S



Wirepas



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MANUFACTURED  
IN AUSTRALIA



SCAN FOR FULL SPECIFICATIONS

# Aelita

60W. Smart LED Conveyor/Area Light

## A revolutionary breakthrough in industrial site lighting is here

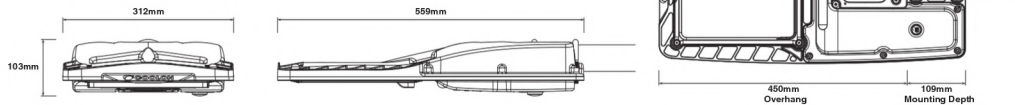
Aelita is the top-of-the-range smart light, offering more features than any other fitting in the Brilliant Connected lights range. Aelita is fitted with a visual warning indication system that allows propagating any emergency status across the site, equipped with the adaptive amber feature to combine environment friendliness with personnel safety, and optimised for prolonged emergency operation. Taking a leap from the DLK3 model, Aelita also features Motion Switching and Motion Reporting capabilities.

### Key Features

- Mesh Backbone
- Network Standby 24hrs
- Emergency Light
- Emergency Reporting
- Amber/White Switching
- Motion Switching
- Warning Indicator Light
- Motion Reporting
- Over-The-Air Upgradable
- Digital Switch-Off
- Remote Dimming

### Designed for

- Conveyors
- Walkways
- Stairwells
- Stacker / Reclaimers
- Pedestrian Access Ways
- Campsite Area Lighting
- General Area Lighting
- Mining Processing Plant
- Bulkheads
- Material Washing & Crushing



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MANUFACTURED  
IN AUSTRALIA



SCAN FOR FULL SPECIFICATIONS



# Blinky

40W Visual Signalling System

## Never be caught unaware

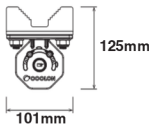
Introducing the ultimate visual warning propagation system – Blinky. From the moment it's plugged in, every single light automatically connects across the site forming a robust wireless network and enabling the quickest and most efficient visual warning propagation system. Regardless of the size of the site or the complexity of its infrastructure, any emergency signal is instantaneously picked up, wirelessly transmitted, and visually propagated through every single light in the network at the same time.

### Key Features

- BitCortex
- Dynamic Colour Changing
- Improved Situational Awareness

### Designed for

- Distributed Visual Signaling
- Visual Warning Indicator
- Warning Strobe
- Flashing Emergency Beacon





SCAN FOR FULL SPECIFICATIONS

### Industrial lighting has evolved

XINIX is not only a robust and superior batten light replacement, it is also a giant leap forward towards enabling Industrial IoT across your site.

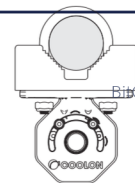
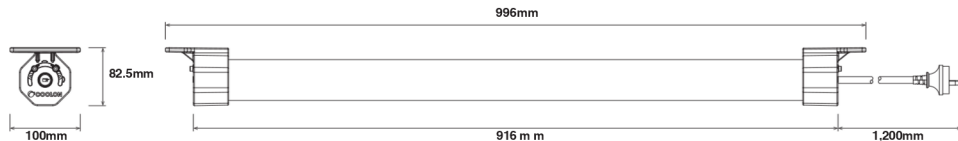
Built around a wide suite of sensors and an industrial grade of wireless network connectivity, XINIX lights automatically connect together, forming a wireless mesh network, stretching throughout your whole site. Installing XINIX lights is the best way to upgrade lighting and effortlessly digitize the entire site without the need of cabling or engineering.

### Key Features

- Mesh Backbone
- Network Standby 24hrs
- Remote Dimming
- Over-The-Air Upgradable
- Quality uniform light
- High IP and IK ratings
- Various CCT choices
- Variety of optics available

### Designed for

- Conveyors
- Emergency Lighting
- General Area Lighting
- Pedestrian Access Ways
- Stacker / Reclaimer
- Staiwells
- Tunnels
- Walkways





SCAN FOR FULL SPECIFICATIONS



# EM Bulkhead 3

40W. Smart Bulkhead Light

## Versatile. High-performing. Smart.

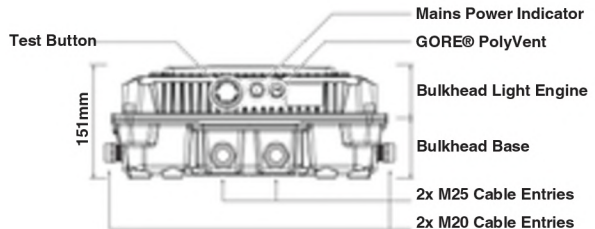
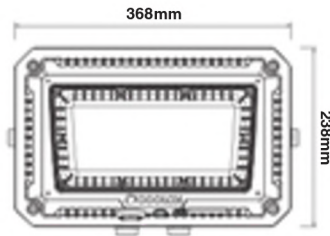
Our classic Bulkhead is now fitted with BitCortex wireless network nodes, combining the original high performance and versatility with the cut-edge technologies and digitisation capabilities.

### KeyFeatures

- Mesh Backbone
- Network Standby 24hrs
- Remote Dimming
- Over-The-Air Upgradable
- Quality uniform light
- High IP and IK ratings
- Various CCT choices
- Variety of optics available

### Designed for

- Exit Routes
- Platforms
- Walkways
- Stairwells
- Substation
- Tunnels
- Conveyors



Wirepas



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MANUFACTURED  
IN AUSTRALIA

# About



## **/ About Coolon**

We have been manufacturing and perfecting our lights for over 20 years, and they are now known (and expected) to last for years at a time without maintenance or replacement. Our oldest unit has been hard at work for 9 years now with no interruptions. We set out to solve individual issues a site faces, so our lights come in a whole variety of optics and CRIs, as well as with DarkSky and Turtle-Friendly compliance configurations. And the quality of units allows them to work right through heat, dirt, rain, vibration, dust, rust, salt, chemicals and whatever else mine sites can offer. As a result, Coolon lights can be found at almost every site in Australia and are seen as standard in many areas.

## **/ Aussie-Made Tough**

All our lights are designed, made and tested exclusively in Australia. This is a heartfelt value that's very dear to us, and we are very proud to have been able to manufacture in Australia for over 20 years, even during the pandemic.



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# Learn more



## Want to learn more about the Brilliant Connected Lights?

Scan the QR code to watch our multi-award-winning presentation below



### Lighting As A Conduit For Technological Disruption

Presented at Mine Electrical Safety  
Conference QLD 2022



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- Full Product Catalogue

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Refer to our website for the latest information.

2023.5

For more information:

