

An aerial, top-down view of a port at night. A large blue container ship is docked at a pier, illuminated by bright lights. Several yellow and red container cranes are visible along the pier. The water is dark, and the sky is a deep blue. A diagonal green line runs from the top left towards the bottom right, separating the top text area from the bottom text area.

SMARTQUIP

Abacus[®]
Leaders in Lighting

Redefining Lighting Solutions



ABOUT SMARTQUIP

Introduction

Smartquip is a leading provider of intelligent, technology-driven solutions for airports, seaports, rail terminals, warehouses, and interconnected industrial sectors.

Formerly known as Dataintrans, we have rebranded to better reflect our evolution and expanded focus. Our growth beyond data solutions now encompasses a broader range of innovative technologies ranging from lighting to smart gate OCR systems and in-vehicle MDVR and camera systems, designed to enhance logistics and transport operations across key markets.

What Sets Us Apart

Specialised Industry Expertise: Decades of experience delivering tailored solutions for transport and logistics infrastructure, ensuring operational precision and reliability.

Seamless Systems Integration: End-to-end delivery, from conceptual design and engineering to implementation and ongoing lifecycle support.

Advanced Technology Solutions: Integration of smart lighting systems, automated gate technologies, and real-time data analytics to optimise operational performance.

Innovation-Driven Approach: Harnessing cutting-edge technologies to deliver future-ready solutions that address evolving industry challenges.

Regional Market Knowledge: A deep understanding of Australasian markets, combined with global partnerships, enables us to deliver world-class solutions tailored to local needs.

Our Commitment

At Smartquip, we deliver intelligent solutions that optimise operations, enhance safety, and improve efficiency across logistics and transport sectors. Through strategic partnerships with global leaders such as Abacus Lighting, we ensure our clients receive world-class, tailored solutions that meet their unique operational requirements.

ABOUT ABACUS

Introduction

Abacus Lighting stands as a testament to innovation and engineering excellence since 1958. With operations across 98 countries and serving over 25,000 clients worldwide, they combine pioneering technology with sustainable practices to deliver world-class lighting solutions.

With products recognised for their market-leading safety and environmental performance, Abacus Lighting continually invests in product development to retain their prime position.

THE ABACUS ADVANTAGE

Consultation: From initial concepts to detailed plans, Abacus provides expert consultancy as part of their comprehensive package

Design: In-house specialists deliver tailored lighting and structural engineering designs

Manufacturing: Their manufacturing expertise ensures the highest standards of quality and precision

Installation: Skilled on-site teams at Abacus ensure safe and reliable installations, delivered on time, every time.

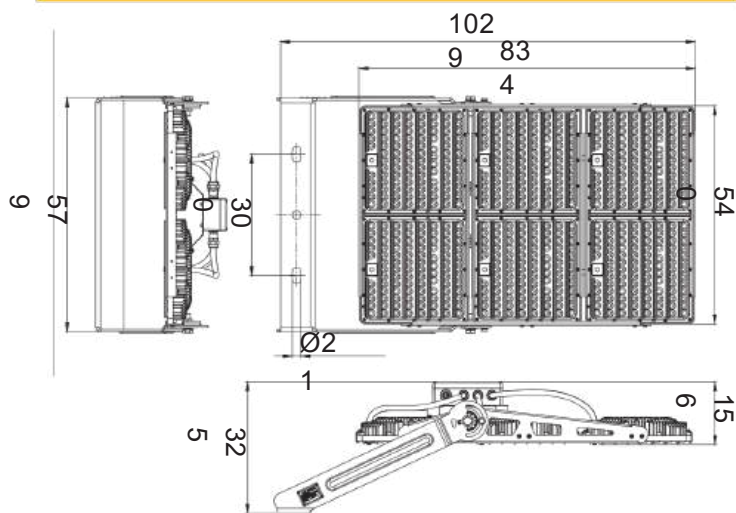
Maintenance: Safeguarding your investment and ensuring long term brilliant lighting performance



AL6100 - AL6300 Challenger 1 LED



Dimensions



Wind Area (flat glass installation):

6 module: 0.149m²

4 module: 0.130m²

2 module: 0.107m²

Specifications and Features

Housing:

Die-cast/profiled aluminium and steel are used to produce an elegant and unobtrusive low profile design.

Ratings:

UKCA, CE, CB, SAA,
IP66

Finish:

- Powder coated
- Black/Red

Driver:

- 1500W driver is 3ch. DALI2/DMX driver, 7.0kg (including mounting arrangements)
- IP66 rated
- 400W - 1200W data available on request
- Integral or remote options available

Example applications:

Sports, Rail, Ports, Amenity and Open Areas

Warranty & Lifetime:

5 years standard warranty

60,000 hours

L80B10 25°C

Imagery

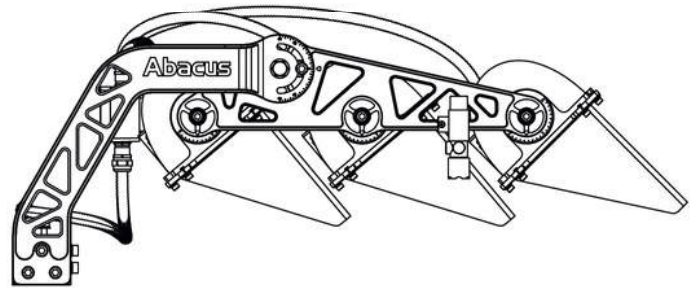


AL7100 Challenger 3 LED

The Challenger 3 LED floodlight is a powerful and versatile lighting solution. With advanced optics and LED technology, it provides exceptional illumination for sports fields, arenas and large outdoor spaces. Its modular design allows for easy installation and maintenance, making it a reliable choice for high mast lighting solutions and stadia worldwide.

Key Features

- Advanced design reduces light pollution and improves spectator viewing
- Precise optical control designed specifically for sport
- Robust for all environments with an IP66 and IK10 rating
- Lens and lumen packages available in a versatile design for multiple applications
- Dali and DMX options
- Full cut off low spill design for control of light

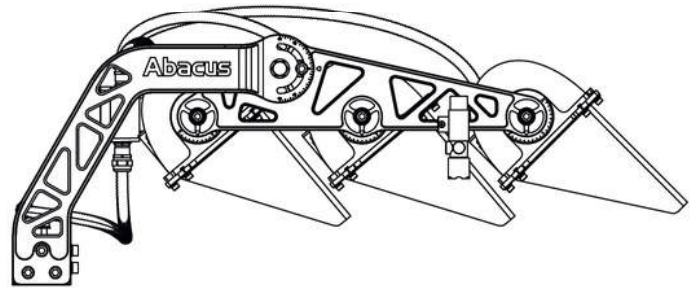


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AL7200 Challenger Mako



Key Features

- Unrivalled lumen to weight ratio providing the highest power output from the lowest possible weight.
- Lightweight fitting is ideal for sporting arena retrofit solutions when upgrading to LED
- 2 modules make up the combined weight of 33kg - equivalent to 2 metal halide luminaires
- No exposed cables
- Constructed from light weight and crash resistant automotive grade aluminium
- Optional RGB modules for interchangeable light
- Customisable scene control system
- Cloud connectivity for control from any location
- 10 year Warranty



AL9100 SERIES GRP Quartz Evo Bollard

Redefining the benchmark for bollard performance

This next generation of LED bollard takes the existing tried and tested design of the LED Quartz and combines it with the latest cutting edge optical and GRP technologies.

Our Glass-fibre Reinforced Polyester (GRP) range provides a passively safe, non-conductive alternative to steel.

With power consumption reduced by almost 50% against the original product, significant performance gains and market leading bollard spacings greater than any other product on the market, the Quartz Evo redefines the benchmark of modern bollard lighting.

Key Features

- Non-conductive GRP material
- Revolutionary low glare optic design giving unrivalled uniformity and bollard spacing
- Symmetrical and asymmetrical options to suit all requirements
- Wider door width for ease of installation and maintenance
- 15.2 kg combined weight for ease of install
- Quarter turn closing mechanism for ease of use
- Vandal resistant, IP66 flush door and fixings available
- Flange plated and root mounted options
- 3 hour emergency battery backup option available
- Also available in a steel version with an aluminium head



AL4700 Orion Pro LED

An evolution of the Orion series

The Abacus Orion Pro LED floodlight stands out as a pioneering lighting solution, delivering efficient and high-quality illumination for a wide range of outdoor spaces. It excels in achieving British standard BS5489, making it ideal for retrofit projects. Thanks to its advanced LED technology, the Orion floodlight not only provides superior brightness but also achieves significant energy savings, contributing to a reduced environmental footprint.

With its high-output 360-degree light distribution and precise optics, the Orion Pro ensures excellent beam control, offering pinpoint lighting precision while minimising light pollution. Overall, the Abacus Orion Pro represents a sustainable and dependable lighting solution that seamlessly integrates performance, durability and energy efficiency.

Key Features

- Direct retrofit to twin-lamp 400W Orion 1.
- Available in 180° asymmetrical and 360° symmetrical beam distributions.
- Sleek, low-profile design.
- Less than 1% upward light emission.
- IP66 and IK10 rated for durability and protection.
- Equipped with two Zhaga interfaces for flexibility.
- Features DALI 2 and D4i compatibility as standard.
- Integrated spigot compatible with 76mm or 89mm shafts.
- Standard colour temperature of 4000K, with other options available.
- Operates efficiently in high ambient temperatures of up to 50°C.
- White polyester powder-coated canopy and spigot for a clean, polished finish.
- Dimmable lumen output for adaptable design requirements.

Applications

- Retail
- Car Parks
- Open area
- Amenity



York Hinge Column

The York Hinge converts a fixed column into a raising and lowering column which complements our existing range of base-hinged columns. York Hinge columns are designed for use in areas that are accessible with bulky equipment or have no room available for our standard raise and lower column to be installed.



YH/PNE/TOOL/48

The 48 diameter unit does not require a separate pump unit and can be lowered by hand safely due to the reduced column size and weight



Benefits

- Vandal-resistant design requiring two specific security keys for access and operation.
- Portable, one-size-fits-all tool design enables simple, single-person operation.
- Maintenance-free hinge design helps keep ongoing financial costs low.
- Ideal for use in inaccessible areas, such as bridges or petrochemical platforms, where standard raise-and-lower columns cannot be used.

Features

- Lowers the top section of the column in any set direction with no outward swing of column sections.
- Suitable for use on columns up to 6m in height.
- Two versions available to fit 76mm and 48mm diameter shafts.
- Supports headloads up to 25kg at 6m with the larger unit and 15kg at 3m with the smaller unit.
- Vandal-resistant security bolt locks the hinge securely in place.
- Increased cabling capacity compared to previous designs due to the external lowering device.
- Constructed from cast steel for durability.
- Finishing options include galvanising, painting, or powder coating.
- Maintenance-free design for ease of use.
- Operable by a single person.
- The York Hinge is as strong as the column itself.
- Wind loading capacity is not compromised.
- The York Hinge can be retrofitted to existing fixed columns; contact our team for further information

High mast lighting range

OUR PRODUCTS

Base-hinged masts

- Mid range base-hinged 10m to 20m
- Grand range base-hinged 20m to 50m

Fixed masts

- Club range 15m to 30m
- Area range 20m to 50m
- Stadium range 30m to 70m

Lowering headframe masts

15m to 50m

Telescopic masts

- Club range to 20m
- Stadium range to 50m

Wind turbine masts

- Base-hinged range to 25m
- Fixed mast structures

Telecommunication mast structures

Monopole structures to 60m



High mast lighting range

BASE-HINGED MASTS

Since the first model was introduced over 50 years ago, Abacus base-hinged masts have become some of the most popular products worldwide. Robust and simple to install, they are incredibly cost-effective, especially as they require minimal ongoing maintenance.

The unique operating system, the first and still the best of its kind on the market, is as safe as it is simple.

Features a gravity lock and quick-lowering mechanism for ease of use. Designed to be easily accessible for maintenance and operation.

Specification

All models are hot-dip galvanised to ISO EN 1461. Base-hinged raising and lowering masts with gravity locks are installed and operated using an independent hydraulic cylinder counterbalance unit.

Why base-hinged?

- Quick and simple to assemble and install – up to three times faster than fixed or winch-lowering models
- Safe – no climbing, as all maintenance and floodlight adjustments can be done at ground level
- Virtually maintenance free – thanks to straightforward design and robust engineering
- Attractive – with no ladder or platform to interrupt the mast's clean, modern lines
- Versatile – with eight models, all designed for different load weights
- Particularly suitable for high-wind or hurricane-prone zones, as masts can be lowered in advance of storms



Fast and simple

Masts are assembled and installed at ground level using low-capacity equipment.



Safety first

Safe and simple maintenance at ground level. No climbing, no high level platform with difficult access.



Versatile and robust

Up to 50m high and built to last with low-cost maintenance.

High mast lighting range

BASE-HINGED MASTS WITH AUTOMATIC SEQUENCING

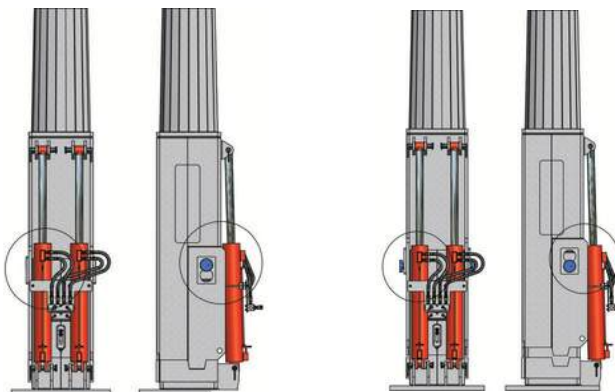


For many years, the base-hinged mast has been a popular choice amongst clients. As such, we decided to build upon its success and take the concept one step further. This involved developing and patenting an automatic sequencing system within the mast – a feature that enables several masts to be raised and lowered at the same time, all from a single central point.

Together with positional sensors, a Programmable Logic Control (PLC) unit co-ordinates and monitors the whole raising and lowering process. Hydraulic cylinders fitted to the base of the mast work together with a mechanised pivot, allowing the mast to raise or lower smoothly in a single failsafe operation.

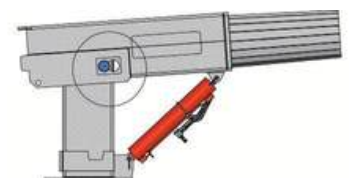
Applications

Because automatic sequencing eliminates the need to move a counterbalance unit from mast to mast, it's the ideal solution in situations where several masts need to be quickly lowered at the same time. Hurricane and typhoon wind zones offer one example of an ideal application for automatic sequencing. Before the arrival of tropical storms, high-cost capital equipment can be protected by lowering the structures to safety.



Operator remotely engages pivot within mast...

...which releases the internal locking mechanism...



...which enables the mast to be lowered automatically in just a few minutes.

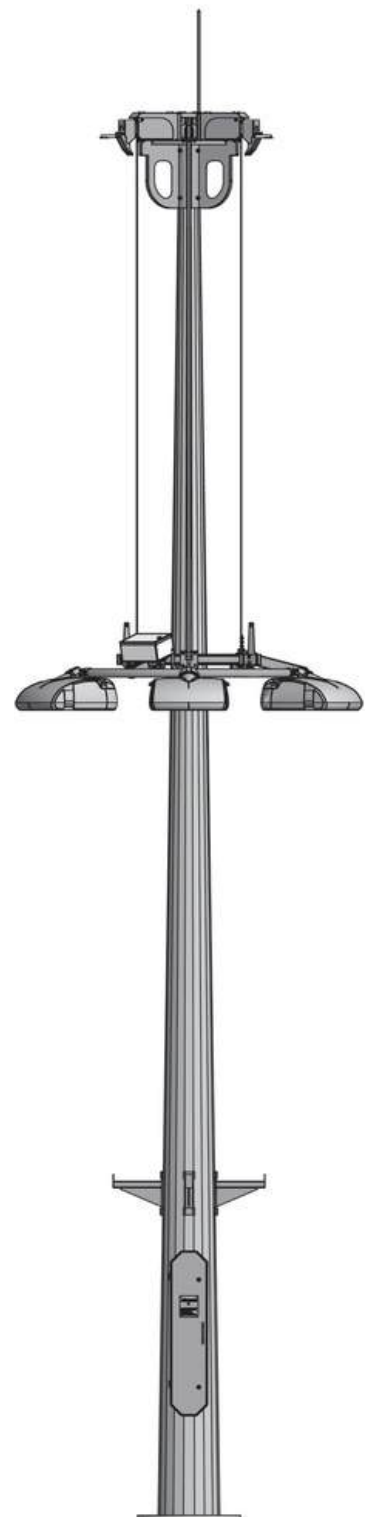
High mast lighting range

LOWERING HEADFRAME MASTS

The engineered headframe, with its secure three-pulley system, is available with or without our innovative latching system. A single multi-core electric cable has its own independent pulley, meaning it doesn't become entangled with other cables in the mast.

Features

- Headframe supported by three stainless steel cables for longer-term stability than twin cable systems
- Option to install mechanical latching system on three arms, to release strain on cables when headframe is in the operating position
- Headframe supplied prepared ready for installation, complete with three cables looped for dropping into the mast shaft and junction box for the multicore cable mounted on headframe
- A lightweight dual-speed reversible power tool is supplied with its own mounting bracket, which is clamped directly to the body of the mast. A remote hand-held box with non-latching buttons controls the unit, enabling the operator to stand at a safe distance when lowering
- Single 275kg or single 550kg winch located in the base of the mast. The winch is self-sustaining, with a gravity latch on the input shaft
- A 10mm earth terminal is provided in the base of the mast
- Single multicore cable for all lanterns is located on an independent pulley, stopping multiple cables from becoming entangled inside the mast
- Single multicore – with 18 cores on the 275kg winch mast (for up to 8 floodlights/lanterns), or 25 cores on the 550kg model (for up to 12 lanterns)
- A multicore electric cable, with integral signal cables for CCTV and WiFi, is available on request
- Electrical cable is supplied with a plug and socket at lower end. This means you can detach the cable and power the headframe at ground level using a separate extension cable





SMARTQUIP

For more information or to make an enquiry, please contact

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