ILED® Aquarius CIRCLE-H® Helideck Lighting System

Low profile - Less than 25 mm
Precision Machined
Interlock Mounting System
Special Anti-slip Coating
Why CIRCLE-H®?

Helicopter deck signalisation lighting has now taken off into a new direction with the IMT CIRCLE-H® Lighting System.

Throughout the industry, it is now fully agreed and accepted that the old method of illuminating the TD/PM Circle and H with flood lights results in the common dangerous problem of creating the disorientating “black hole” effect and at the same time being a source of glare to the helicopter pilots.

Developed with close guidance from the CAA and in full accordance with the requirements of CAP 437, IMT’s CIRCLE-H® TD/PM Lighting System provides the optimum solution to these problems.

Cleanly and clearly indicating the TD/PM Circle and H, the IMT CIRCLE-H® is the only fully certified system of its type – providing optimised safety – without compromise.

The unique integrated mounting plate is able to be customised to suit specific requirements and with a choice of fixing and installation methods to suit all deck types, the CIRCLE-H® can be installed as a stand-alone system or as a fully integrated total helideck lighting and status light safety system solution.
The light characteristics of the CIRCLE-H® system are designed in compliance with CAP 437 so that the location of the helideck on the platform is easier to establish and increases its conspicuity. In line with CAP 437 requirements, our CIRCLE-H® system has being independently tested and certified – by DEKRA – Attestation of Conformity No: 2168390.01 AOC.

CIRCLE-H® is less than 25 mm high, even with the mounting plate. The system is comprised of just 4 main parts. The light unit is easily connected by an Ex-certified, patented plug system. Only cables and conduits are variable – to the D-Value of the helideck.

IMT’s CIRCLE-H® system is manufactured from marine grade aluminium – which is by far and away the best material for marine applications and for temperature management control. The one-piece mounting plate is designed so that it can easily be adapted to suit all types of deck construction.
IMT understand and fully appreciate that it is not merely about the CIRCLE-H® system – but just as – if not more importantly – that it is installed correctly and proficiently. Therefore, IMT have teamed up with selected partners so as to be able to carry out pre installation surveys of helidecks – these surveys and inspections are carried out by fully certified and competent personnel. When installation is taking place off-shore and where the helideck is positioned such that working conditions are liable to be extreme and exacting, then our approved survey and install teams have the following base skill sets as an absolute minimum:

- CompEx
- BOSIET
- MIST
- Offshore medical
- IMT approved installer status
- Mechanical fixings approved installer status
- IRATA rope access accreditation lead by a level 3 accredited team member
- Helideck landing area awareness

With regard to “new build and yard” installation – then the necessity for an extreme working conditions trained and fully certified install team is lessened somewhat. So, whatever your install requirements are, be it off-shore, yard, full turnkey or supervised, then IMT has the solution to best fit your needs and legal requirements. In preparation for installation and to ensure that all issues relating to correct compliance of CAP437, ICAO Annexe 14 and IMO MODU are covered and adhered to, IMT can offer a comprehensive and extensive on-site helideck survey and report service. If you would like further information and advice as to how we can help you in the process of pre-qualifying and preparation for CIRCLE-H® installation, then please contact us.
Technical Details

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light source</td>
<td>LED</td>
</tr>
<tr>
<td>Luminous intensity</td>
<td>Standard and bright setting</td>
</tr>
<tr>
<td>Average power for a complete system</td>
<td>Approx. 175 W in bright setting (Depending on size D-value/system requirements)</td>
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<tr>
<td>Light colour</td>
<td>Green and Amber</td>
</tr>
<tr>
<td>Horizontal Emission</td>
<td>According to CAP 437</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>-30 °C to +55 °C</td>
</tr>
<tr>
<td>Burning position</td>
<td>Base down</td>
</tr>
<tr>
<td>(Re)ignition</td>
<td>Immediate</td>
</tr>
<tr>
<td>Voltage range system</td>
<td>24 Vdc ± 10 % and 90 – 255 Vac</td>
</tr>
<tr>
<td>Ingress protection</td>
<td>IP67</td>
</tr>
<tr>
<td>IEC protection classes</td>
<td>Class 1</td>
</tr>
<tr>
<td>Lens</td>
<td>PC protected against UV light</td>
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<tr>
<td>Housing</td>
<td>Marine Grade Aluminium</td>
</tr>
<tr>
<td></td>
<td>With a special anti-slip coating</td>
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<tr>
<td></td>
<td>RAL 9003 Signal White or</td>
</tr>
<tr>
<td></td>
<td>RAL BS 4800 – 10.E.53 Sun Flower Yellow</td>
</tr>
<tr>
<td>Weight of the light fitting</td>
<td>± 3 kg</td>
</tr>
<tr>
<td>Package weight per piece</td>
<td>Dependant on system type and configuration</td>
</tr>
<tr>
<td>Package dimensions</td>
<td>Special explosion proof plug system</td>
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<tr>
<td>Connection</td>
<td></td>
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</tbody>
</table>

Unique Technical Points

- Fitted in place – including mounting plate – less than 25 mm
- DEKRA LIGHT CERTIFICATE
- Certified to IP67
- Ambient Temperature Range of -30°C to +55°C
- Machined Marine Grade Aluminium – no mixing of plastic and steel materials
- Unique ‘interlock’ design to withstand impact shear forces
- Light intensity adjustable – Full control by communication
- Can be fully integrated with Helideck Status Light Systems
- Only 4 parts, only variable parts are cable covers and cables
- Easy connection by plug system
- Different fixing methods – to suit all helideck types
- Easy to replace fixtures
- ATEX and IECEx Zone 1 certified
- Low power consumption
- Special anti slip coating

Certificates

- ATEX classification: Group II, Category 2, Gas
- Area classification: Category 2 (Zone 1)
- Atex Certificate (DEKRA): DEKRA 13ATEX0173
- IECEx Certificate (DEKRA): IECEx DEK 13.0059
- Light Distribution Attestation (DEKRA): 2168390 AOC
- Marking (ATEX): Ex II 2 G Ex e mb IIB T4 Gb
- Marking (IECEx): Ex e mb IIB T4 Gb
- CE: Yes
- DEKRA Certification
- Lloyds – Installation Design Approved
- High Life expectancy with low maintenance
- Shock and vibration resistant
- According to CAP 437
- According to ICAO
- According to IMO MODU
- ABS certified