

Q-Aviation Lighting / Helideck Lighting / Q-Explosion Proof HAPI System

# **Q-EXPLOSION PROOF HAPI** SYSTEM

- AVIATION Q for Quality



### CERTIFICATES



Q72RI01 - Q- Explosion Proof HAPI-System

## **TECHNICAL DETAILS**

Application: Hazardous Area: Classification: Light Source: Light Colour: Flash Sequence: Light Intensity: Vertical Beam Profile: Colour chromaticity: Photometry:

Enclosure: Mounting: Input Voltage: Ambient Temp: In Compliance With: Cable: Consumption: Life expectancy: IP index: Weight: Dimensions: Packaging dimension: Offshore / Onshore Zone 1 and 2 Class 1 and 2 LED, steady burning + flashing Green 530nm and Red 630nm 2 Hz 9000 cd as per ICAO as per ICAO According ICAO Annex 14 Volume II -Figure 5-11 Aluminium, Powder coated Rigid, 8x M8 24 VDC -25°C to + 40°C ICAO annex 14, Volume II 1 x 3x2,5mm<sup>2</sup>, 1 x 6x1mm<sup>2</sup> 50 Watt 100.000+ hours IP 67 25 Kg. 688x339x249 mm (LxWxH) 800x400x400 mm (LxWxH)

A) This product must be connected to the Q72RI03C -Q-Controller for HAPI system. The Controller is sold separately. B) When a complete helideck/heliport package is offered, the Q-Controller for HAPI system, can be built in the Q31WMX/R/S Control Systems.

### DESCRIPTION

The Q-Explosion Proof HAPI system consists of a single lighting to provide a visual indication of the correct approaching path of the helicopter.

In compliance with ICAO requirements, the Q- Explosion Proof HAPI System is located adjacent to the nominal aiming point and aligned with the preferred approach directions.

The angle of elevations setting of the Q-HAPI System is easy to adjust by the build in monitor showing the actual angle.

The Q-HAPI System is below 25 cm and it is therefore approved for all helidecks installations, forming no obstruction for the helicopter. Each flight approach path is required to have a HAPI system.





ISO Certificate: 2018-0084977 QAR Certificate: GB/ITS/QAR17.0013/01 Notified body number: C0359

RoHS

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# DATASHEET

# CERTIFICATION

#### EXPLOSION PROOF HAPI SYSTEM

Atex Certificate: ITS20ATEX805940X IECEX Certifcate: IECEx ITS 18.0055X

(E) II 2 G Ex mb op is IIC T4 Gb (E) Ex d IIC T4

#### Cable Gland (2 x Included)

Atex Certificate: SIRA13ATEX1068X, SIRA13ATEX4074X IECEX Certificate: IECEx SIR 13.0023X, IECEx SIM 14.0006

🐵 II 2G, II 1D Ex d IIC Gb, Ex e IIC Gb, Ex ta IIIC Da

🖾 II 3G Ex nR IIC Gc I M2 Ex d I Mb, Ex e I Mb

Ex d IIC Gb, Ex e IIC Gb, Ex nR IIC Gc, Ex d I Mb, Ex e I Mb

## MAIN DIMENSIONS

Find the main dimensions and mounting dimensions in the image below





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APPROACH

## **HAPI LIGHT**

The Q- Explosion Proof HAPI System has a module with lights which has a lens system that divides the light into 4 separate segments:

- 1. Flashing Green Light = Helicopter above the optimal approach slope (too high)
- 2. Fix Green Light = Helicopter on the slope
- 3. Fix Red Light = Helicopter slightly below the optimal slope (slightly too low)
- 4. Flashing Red Light = Helicopter below the optimal slope (too low)

Depending on the viewing angle of the pilot in relation to this system, he sees either the Flashing green or the Fix green or the Fix red or the Flashing Red light.

The signal repetition rate of the flashing sectors must be greater than 2 Hz. In accordance with ICAO, the HAPI is capable of adjustment in elevation at any desired angle between 1 and 12 degrees above the horizontal with an accuracy of +/- 5 minutes of arc. The Q-HAPI System will switch off atomically when the vertical misalignment of a unit exceeds  $\pm 0.5$  degrees ( $\pm 30$  minutes).

# **OFFSHORE/ ONSHORE USAGE**

In compliance with ICAO requirements, the Q- Explosion Proof HAPI System must be located adjacent to the nominal aiming point and aligned in azimuth with the preferred approach directions.

The angle of elevations setting of the Q-HAPI System must be such that, during approach, the pilot of the helicopter observing the upper boundary of the "below slope" signal (flashing red) clears all objects in the approach area by a safe margin. The Q-HAPI System is below 25 cm and it is therefore approved for all offshore helideck and onshore applications.







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