

TYPE APPROVAL CERTIFICATE

This is to certify:

That the **Security/ Surveillance Camera**

with type designation(s)
POE Camera System

Issued to

Imenco UK Ltd.
Aberdeen, United Kingdom

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Location classes:

Temperature	D
Humidity	B
Vibration	A
EMC	B
Enclosure	C / IP66

Issued at **Høvik** on **2022-09-15**

for **DNV**

This Certificate is valid until **2027-09-14**.

DNV local station: **Manchester**

Approval Engineer: **Martin Skårerverket**

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Frederik Tore Elter
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

The Imenco POE Camera System consists of:

Imenco Model No.	Name	Description
0482-6030	Marine HD PoE Camera Mk2	The Marine HD PoE Camera Mk2 is a colour camera with day/night sensor, remotely adjustable varifocal lens and built-in IR illumination, it is capable of HD video output over an industry-standard IP video stream. It is designed for use in air, primarily above-decks. It includes a robust and versatile mounting bracket for ease of installation and a IP67 rated marine grade 316L Stainless Steel, Electro-polished housing. Power input: Power over Ethernet+ (PoE+) (IEEE802.3at Class 4), 25.5 W Max.
0527-6013	External Compact Marine PTZ HD IP Camera	The External Compact Marine PTZ Camera is an in air high-definition Power over Ethernet ultra-rugged marine 3MP IP colour Pan, Tilt & Zoom CCTV camera with integrated pedestal assembly and a IP67 rated marine grade 316L Stainless Steel Electro-polished housing. Power input: PoE++ (IEEE 802.3bt) 60W for standard camera, 90 W required for illuminator options.

Compass safe distance:

Standard: 400 mm
 Steering: 300 mm

Place of manufacture

Imenco UK Ltd.
 Airport Industrial Estate
 Wick
 KW1 4QS
 UK

DNV ID: 10724548
 Alpha House
 Blacknest Road
 Blacknest
 Alton
 Hampshire
 GU34 4PX
 UK

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Test reports:	Number	Rev. / Date
MS Testing Marine Type Approval Test Report – Imenco	TL21090	2 / 2021-08-21
MS Testing Salt Mist test report – Imenco	TL21090 SALT MIST	1 / 2021-08-18
MS Testing IPX6 test report - Imenco MK2 Heater Camera	TL22271A	1 / 2022-08-02
MS Testing IPX6 Test report - Imenco MK2 Standard Camera	TL22271B	1 / 2022-08-02
MS Testing IPX6 Test report - Imenco Compact PTZ Camera	TL22271C	2 / 2022-08-22
0482-6030 mk2 - IP 67 Test result	DDTR0016	2020-10-13
Declaration of IP Rating (Imenco 0527-6013)	121	1 / 2021-02-01
Drawings/Datasheets:		
External Compact Marine PTZ Camera St/St ICD	0527-6013-101 ICD	A / 2021-04
Marine HD PoE Camera Mk2 - Standard ICD	0482-6030-0201 ICD	A / 2021-10
Marine HD PoE+ Camera Mk2 - Heater ICD	0482-6030-0206 ICD	A / 2021-10
Datasheet - Imenco 0482-6030 Marine 5MP PoE+ camera	0482-6030	C
Datasheet - Imenco 0527-6013 External Compact Marine PTZ HD IP Camera	0527-6013	H
Specifications:		
Product Specification - 0482-6030 Marine HD PoE Camera Mk2	0482-5111	A / 2022-02
Technical File and Declaration of Conformity - 0482-6030	0482-5091	A / 2021-12
Marine HD PoE Camera Mk2		
Technical File and Declaration of Conformity - 0527-6013 PTZ Camera	0527-5004	A / 2022-01

Type approval assessment report for TAA000033C, Area UK IE CMC VMC 2022-03-01

Tests carried out

Applicable tests according to class guideline DNV-CG-0339, August 2021.

For the bridge mounted components the 'Acoustic noise and signals' and the 'Compass safe distance' were measured according to sections 11.1 and 11.2 of IEC 60945, 4th edition (2002).

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE