



NOTIFIED BODY
No 0191

CERTIFICATE OF TYPE APPROVAL

(EC Certificate of Type Examination - Module B)

(Marine Equipment Directive - 96/98/EC, as amended*¹)

Applicant:-
Vistar Night Vision Ltd
24 Doman Road
Camberley, Surrey GU15 3DF
United Kingdom

Manufacturer:-
Vistar Night Vision Ltd
24 Doman Road
Camberley, Surrey GU15 3DF
United Kingdom

This is to certify that the applicant has submitted details of a:-

Night Vision Equipment for High Speed Craft
(Commission Directive 2008/67/EC – Item A.1/4.43)

Of a type known and designated as:-

Vistar IM223 High Speed Collision Avoidance System
(Comprising component parts and having technical characteristics shown in schedule 1)

and that this has been tested and assessed, and when used in a combination of component parts as described in the attached schedules, is CERTIFIED as complying with:

ISO 16273:2003 "Performance standard for Night vision equipment for HSC"
IEC 60945:2002 "General Requirements for Marine Navigational Equipment"

(being Methods of testing and test results specification, published by the International Standards Organisation and the International Electrotechnical Commission. and by the British Standards Institution as BS ISO 16273: 2003 & BSEN 60945 :2002.

It is also CERTIFIED that the equipment conforms to performance standards not inferior to those adopted by the International Maritime Organisation, and which are contained in Resolution MSC.97(73) and resolution A694(17).

SIGNED:

DATE of ISSUE: 7th August 2009

DATE of EXPIRY : 6th August 2014

R Sharp Authorised Signatory

Certificate Number:

QQ-MED-07/09-01

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on the attached schedule

QinetiQ
Cody Technology Park
Ively Road, Farnborough
Hampshire. GU14 0LX



Maritime and Coastguard Agency
The MCA is an Executive Agency of
the Department of Transport

*1 Commission Directives 2008/67/EC, 2002/75/EC & 2002/84/EC

Under the terms of the United Kingdom Statutory Instrument, No 1957 : 1999, the QinetiQ Ltd has been Notified to the European Commission by the Maritime and Coastguard Agency as a Body authorised to conduct Conformity Assessment procedures under the provisions of the European Council Directive 96/98/EC on Marine Equipment and issue Certificates of Type Approval.

Certificate of Type Approval - Schedule 1

Vistar IM223 High Speed Collision Avoidance System

The applicant declared that the following units when combined form an operational Marine Shipborne Night Vision Equipment for High Speed Craft. The units below have been assessed & tested and satisfactory details of these units were included in the technical file. These units form systems consistent with the Item Description A.1/4.43, given in Annex A1 of Directive 2008/67/EC

MAIN UNITS

1.	Image Intensifier Unit	SM 8449	
2.	Intensifier Control Unit	SM 8558	
3.	Power Boosting Box No. 4	SM 8455	
4.	Helmsman Panning Unit No. 2	SM 8435	
5.	450Watt Infra Red Illuminator (4 off)	IM 545	*2
	and Illuminator Control Box No. 4	SM 8506	*2
	Illuminator Transformer Box (4 off)	SM 8507	*2
	or 150Watt Infra Red Illuminator (4 off)	IM 515	*3
	and Illuminator Control Box No. 2	SM 8259	*3
	or Illuminator Control Box No. 4	SM 8506	*3
	and Illuminator Transformer Box (2 off)	SM 8507	*3

----- End of List -----

Note regarding certificate issue *4

NOTES:-

- The night vision performance of this system was tested against the ISO 16273 standard in a typical installation onboard a 54m HS pilot craft. The system tested used 4 x IM 515 IR Illuminators. This system also has BV type approval ref certificate 14362/AO BV.
- The 450Watt Illuminators give maximum range and require to be operated with 1 transformer Box each and illuminator control box No 4.
- The 150Watt Illuminators may be suitable for smaller installations where a reduced illumination range is acceptable. They operate from 24V DC via illuminator control box No 2 or with illuminator control box No 4 and 2 off Illuminator Transformer Boxes for AC power.
- Night Vision equipment for High Speed Craft has transferred into MED Annex A1 equipment list. This certificate which was originally UKTA QQ-TAN-03/06-01 is now reissued as an MED certificate of Type Approval. No additional testing or assessment of the Night Vision equipment has been conducted.

Technical Characteristics

Notified Body 0191

PARAMETER	PROVISION	COMMENT
NIGHT VISION TECHNOLOGY	Image Intensifier	Active Illuminated systems. Set of 4 illuminators mounted on bow of the vessel.
DISPLAY SIZE	195mm x 145mm	9" CRT in SM8558 Intensifier Control Unit
FIELD OF VIEW	22° x 16.5°	Fixed Focus
PANNING RANGE	±180°	To Port or Starboard, Switched positions at ±10° & ±20° steps
VERTICAL RANGE	±7.5°	Vertical Trim (Horizon Control)
IEC 61162-1 SERIAL PORTS	None	
POWER SOURCE	24V DC 115/220V AC, 50-60Hz	Nominal, All units except below SM8507 Illuminator Transformer Box.
Temperature Range - Exposed & IEC 945 Class - Protected	-25°C to +55°C -15°C to +55°C.	-- Intensifier Unit, Illuminators +70°C (Storage) -- All other units

Conditions of Issue of this certificate are printed on the next page

QinetiQ
Cody Technology Park
Ively Road, Farnborough
Hampshire. GU14 0LX

Certificate Number: **QQ-MED-07/09-01**

Certificates of Type Approval
Conditions of Issue

1. Each Certificate will be used in its entirety and not reproduced in part.
2. This certificate remains valid until the date shown (normally 5 years) unless cancelled or revoked, provided:-
 - i) The design and manufacture remain unmodified from the specimen tested and recorded in the Technical Construction File;
 - ii) Any conditions contained in the schedule are complied with;
 - iii) Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply;
 - iv) And, the equipment remains satisfactory in service.
3. The mark of conformity may only be affixed to the equipment listed on this certificate and a manufacturer's Declaration of Conformity issued when the production Quality Assurance requirements laid down in Annex B, of the Directive (96/98/EC) is fully complied with and controlled by a written inspection agreement with a Notified Body.
The use of the QinetiQ Notified Body Number (0191) in combination with the Wheelmark implies that the manufacturer is Registered with the QinetiQ Quality Assurance Scheme. A Certificate of Registration is issued to the manufacturer and should be made available on request. The manufacturer is responsible for ensuring that certification renewal and periodic surveillance are maintained.
4. USCG Approval Number, A Mutual Recognition Agreement (MRA) on marine equipment exists between the European Commission and the US Coastguard but only applies to equipment types included in the listing of marine equipment annexed to the MRA. For included equipment a USCG Approval number may be issued. If Issued this can be found under the MED certificate number on the first page and should be used on the main identity label of the equipment. Radio and Radar equipment continues to need separate or additional approval by the USA FCC.
5. This certificate does not confer any approval status to this equipment other than defined by, and tested according to the specifications listed on sheet 1.
6. The labeling requirements of IMO Resolution A694(17) shall be met. Descriptions of each unit of apparatus forming part of the equipment will be as given on this Certificate. Each unit of equipment will be marked with the minimum safe distance at which it should be mounted from a standard and steering magnetic compass.
7. No unit of apparatus shall be advertised or labeled as "approved" or "certified" on behalf of the Maritime and Coastguard Agency, the Department of Transport or the QinetiQ Group in any sense other than that it is a type that has been assessed as satisfactory against the specification;
8. The manufacturer must advise QinetiQ of any intended changes to the design or production of the equipment which might affect the equipment performance.
9. Minor Modifications to the equipment will be considered on a case-by-case basis. QinetiQ will review any factory test results, in consultation if necessary, with the test facility that conducted the original Type Approval testing on the equipment. QinetiQ will advise the manufacturer if any further testing is required to maintain valid certification.
10. If an equipment manufacturer wishes to have the type approved equipment designated under alternative names (e.g. agent/distributor's name and model number), a separate application should be completed and sent to QinetiQ.

QinetiQ Ltd
Marine Approval and Testing Service
Cody Technology Park, Room 1005/A5
Ively Road, Farnborough
Hants, GU14 0LX
United Kingdom