



EC TYPE EXAMINATION (Module B)



N. MED388219CS

This is to certify that RINA Services S.p.A. (Notified Body n° 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Navigation Equipment requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2019/1397

MED Items N°	MED / 4.43
Description	Night vision equipment for high-speed craft
Type	ND 1200 PREDATOR
Applicant	M.A.S. Marine S.r.l. Via Armando Diaz, 10 80055 Portici, Napoli Italy
Testing Standards	ISO16273: 2003; EN60945 2002 incl. IEC60945 Corr.1 (2008); EN62288:2014
Reference Standards	SOLAS 74 Reg. X/3; IMO Res. MSC.36 (63)-(1994 HSC Code) 13; IMO Res. MSC.97 (73)-(2000 HSC Code) 13; IMO Res. A.694 (17); IMO Res. MSC.94(72); IMO Res. MSC.191 (79)
Issued in Genoa on December 12, 2019	This Certificate is valid until December 12, 2024

This Certificate consists of this sheet plus an attachment

Giovanni Carratino

RINA Services S.p.A.





Attachment to



CERTIFICATE N. MED388219CS

Manufacturer:

Starlight Italia S.r.l.

Place of manufacturing:

Via Verdi n. 23
80055 Portici, Napoli
Italy

Product description:

Night Vision equipment **ND 1200 - PREDATOR** consisting of:

- a) **Camera** based on a light intensifier tube model **TLC-P 750880**
with WDR CCD, boxed in a AISI 316 Stainless Steel enclosure
External lens are Bioclean® type
Range of focus: 5 m to ∞
- b) **Mounting device** (aluminium alloy) for pan and tilt control
- c) **Joystick box** with cable, model **JSK-P 3191**
Size 140(w) x 90(d) x 56(h) mm
- d) **Control box** model **CNT- BX-P 12003C**
Size: 260(w) x 160(d) x 60(h) mm
Power supply: 24Vdc
- e) **Colour Monitor** 17" Active Matrix TFT LCD model **MNT17-B 120086** with
embedded power supply module model **LSE9901B1250**
Resolution 1080 x 1024
Pixel pitch 0.264x 0.264
Power supply: 220Vac

Reference document:

M.A.S. marine night vision device : User Manual, doc. n. 0010 (17 pages)

Test reports:

TesLab reports : n° 096100F (23/07/2009); n. 19A289N Rev. 1 (2019.11.21)
RINA report for testing according to Resolution MSC.94(72) _24/09/2009 (12 pages)
RINA additional report on RINA form Visite 2 _ 15-24/09/2009 (one page)
RINA Sea trial record - Annex C ISO 16273:2003 _ 24/09/2009 (3 pages)

Disclaimer:

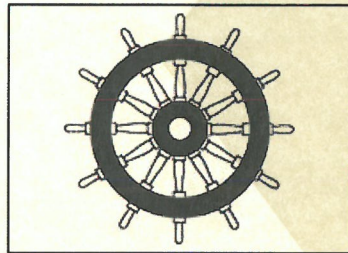
In case of adverse weather condition a degraded image quality may be rendered by the Night Vision System and even cleanness of camera lenses may be reduced (eg. salt moisture thickening , icing etc.).

As a consequence Night Vision System shall be continuously monitored for possible image degradation during ship sailing at night.

Whenever a poor image quality is experienced, Night Vision System to be put out of service and navigation speed to be decreased to a suitable rate to maintain a safe navigation.

Attachment to
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The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E, or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body



XXXX/YYYY

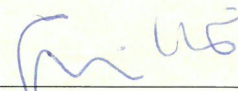
"WHEELMARK FORMAT"

XXXX Notified Body number undertaking surveillance module

YYYY The year in which the mark is affixed

General condition for the approval:

- a) The initial conditions verified by RINA at the time of the approval are to be maintained.
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment.
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA.
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request.
- e) The activities are to be carried out in compliance with the RINA Rules and / or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reaproved prior to it being placed on board vessels to which the amended regulations or standards apply.



Giovanni Carratino