



Certificate number: 76866/A0 BV

File number: MPA2400441

Product code: 4472I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Kongsberg Maritime AS
Kongsberg - NORWAY

for the type of product

DYNAMIC POSITIONING CONTROL UNITS
K-Pos DP , K-Pos PM, K-Pos DPM, cJoy

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships/Offshore Units
Bureau Veritas Rules NR659

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 11 Dec 2030

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 11 Dec 2025,

Rune Marstein

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. 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. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 6 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Dynamic Positioning Control System **K-Pos DP**

Position Mooring Control System **K-Pos PM**

Combination of Dynamic Positioning and Position Mooring **K-Pos DPM**

Independent Joystick Control System **cJoy**

1.1 - Modes and Applications:

DP modes: Joystick mode (incl Mixed mode / Auto Heading), Auto Position mode, Autopilot mode, Auto Track mode, Follow Target mode, Seismic Track mode, Offshore Loading modes.

DP Applications: Offshore Loading application, Drilling application, Pipelaying application, Heavy Lift application, DP Status application.

Available configurations: DP-1X, DP-2X, DP-3X.

PM modes: Anchor Handling mode, Position Mooring mode.

cJoy modes: Joystick mode (incl Mixed mode / Auto Heading), Station Keeping mode, Autopilot mode.

1.2 - Software Versions:

K-Pos DP	DP basis release 8.5, update 0 and onwards
K-Pos PM	DP basis release 8.5, update 0 and onwards
K-Pos DPM	DP basis release 8.5, update 0 and onwards
cJoy	DP basis release 8.5, update 0 and onwards

1.3 - Hardware:

Main processing units (one of the following):

- DPC Dynamic Positioning Controller with process unit(s).
- cC Compact Controller with process unit.

Operating Station/Terminal (at least one of the following):

- K-Pos OS Operator Station for K-Pos DP/DPM/PM (including built-in versions).
- K-Thrust OS Operator Station as part of Thruster Control (including built-in versions)
- cJoy OT Operator Terminal for cJoy
- cJoy DP-OT Operator Terminal (Additional Operating Terminal)
- cWing Wing Terminal

1.4 - Hardware Modules:

Components	Part No.	Doc. No.	EC Code	Compass Safe Distance	Certificate
Operator Terminals					
cJoy Operator Terminal, Mk4	110-0010765	110-0018781/C	31 B	500 mm	See §2 and §3
cWing Mk3 Built-in	484758	486670/A	31 B		See §2 and §3
cWing Mk3 Portable	484760	486670/A	31 B		See §2 and §3
Displays					
Display 15" FHD XT MK1	469945	-	-	1100 mm	70000/XX BV
Display 22" FHD X MK1	469948	-	-	-	EU MR
Display 24" FHD XE MK1	469971	-	-	-	EU MR
Display 27" FHD XE MK2	110-0002528	-	-	-	EU MR
Display 32" Full HD 16:9 ECDIS	469973	-	-	-	EU MR
Display 55" Ultra HD 16:9 ECDIS	472402	-	-	-	EU MR
Computers					
Computer MC340 i3 LAN	477549	-	31 B	150 mm	61470/XX BV
Computer MC360	110-0016256	-	31 B	750 mm	73552/XXBV
Accessories					
USB Extender VL66298 Receiver	110-0021928	110-0043970/A	31 B	-	See §2 and §3
USB Extender VL66298 Transmitter	110-0021927	110-0043970/A	31 B	-	See §2 and §3
USB to 4 x RS232 DB9M	452181			-	EU MR
Adapter USB to 1 serial RS232	457971	463482/A	31/41 B	100 mm	See §2 and §3

Adapter USB to 1 serial RS422	459962	463483/A	31/41 B	100 mm	See §2 and §3
L2C module	404654	409453/C	33/43 B	100 mm	See §2 and §3
Serial Splitter NPort 5232-T	415713	318636/E		400 mm	See §5.5
Panel Modules					
Panel ALC	603526	300977/B	31 B	300 mm	See §2 and §3
Panel BU DP	603530	300983/B	31 B	250 mm	See §2 and §3
Panel Input Mk3 COP 05	110-0049940	300984/E	31 B	200 mm	See §2 and §3
Heading Wheel COP05	603550	300985/B	31 B		See §2 and §3
Joystick KC 06-K	304849	307003/B	31/41 B		See §5.5
Tracker Ball Stand alone Panel	334092	338386/A	31 B	470mm	See §2 and §3
Junction Boxes					
cJoy OT JB MK3 w/5m cable	400320	-	31 B	500 mm	See §2 and §3
cJoy OT JB MK3 w/15m cable	400359	-	31 B	500 mm	See §2 and §3
cWing Junction Box for WT	603206	-	31 BS	300 mm	See §2 and §3
Network Modules					
Switch DIN EDS-205A	343608	343879/E	31/41 B	600 mm	See §5.5
Switch DIN EDS-208A	463211	470973/C	31/41 B	600 mm	See §5.5
Switch DIN EDS-308	702485	178001/F	31/41 B	600 mm	See §5.5
Switch DIN EDS-316	351658	352676/E	31/41 B	600 mm	See §5.5
Router DIN EDR-8010-2GSFP	110-0061800	110-0061805/A	31/41 B	400 mm	See §5.5
Switch DIN EDS-408A	467615	472200/B	31/41 B	600 mm	See §5.5
Switch DIN EDS-518E-4GTXSFP	467617	472202/B	31/41 B	600 mm	See §5.5
Switch Cisco C1000-24T-4G-L	469125	489196/C	31/41 B	240 mm	See §2 and §3
Switch Cisco C1000-24T-4X-L	110-0001617	489196/C	31/41 B	240 mm	See §2 and §3
Switch IKS-6728A	382427	439059/B	31/41 B	500 mm	See §2 and §3
Switch IKS-6726A	110-0037724	110-0037765/A	31/41 B	500 mm	See §2 and §3
Router Cisco C1121X-8P	486643	492309/A	31/41 B	170 mm	See §2 and §3
Power Modules					
Power PRO TOP1 120W 24V 5A	472571	-	33/43	700 mm	48162/XX BV
Power PRO TOP1 240W 24V 10A	472572	-	33/43	700 mm	48162/XX BV
Power QUINT-PS/1AC/24DC/5A	326549	-	31/41	-	21004/XX BV
Power QUINT-PS/1AC/24DC/10A	326396	-	31/41	-	21004/XX BV
Power,TRIO-PS-2G/1AC/24DC/5/B+D	436708	449192/A	31/41 B	300 mm	See §5.5
Remote I/O Modules					
RCU601 Module	477601	110-0022770/A	31 B	300 mm	See §2 and §3
RCU602 Module	383962	418371/C	31 B	300 mm	See §2 and §3
RHUB200-5 Module	603442	312740/C	31 B	300 mm	See §2 and §3
RMP200-8 Module	603443	351488/A	31 B	50 mm	See §2 and §3
RMP201-8 Module	324400	351489/A	31 B	50 mm	See §2 and §3
RSER200-4 Module	603444	312741/C	31 B	50 mm	See §2 and §3
Printers					
Digital Printer	110-0000324	110-0000794/C	-	-	See §2
Printer A4 CS431dw for Bridge	110-0056498	110-0028959/A1	-	-	See §2 and §3

2. DOCUMENTS AND DRAWINGS :

2.1 - K-POS Hardware:

- Doc.No. 448540, K-Pos Hardware List, Rev.J, dated 14-03-2024.
- Doc.No. 5358789, Class Approval Manual K-Pos HW List Rev.A, dated 12-04-2024.

Data Sheets:

- Doc.No. 463482 Rev.A, Adapter USB to 1 serial RS232 Data Sheet, dated 15-03-2016.
- Doc.No. 463483 Rev.A, Adapter USB to 1 serial RS422 Data Sheet, dated 27-06-2014.
- Doc.No. 110-0043970 Rev.A, Datasheet for Veinland VL66298 USB Extender, dated 21-06-2023.
- Doc.No. 409453 Rev.C, LAN to CAN Gateway Data Sheet, dated 28-01-2020.
- Doc.No. 318636 Rev.E, Moxa NPort 5200 Serial Device Data Sheet, dated 22-02-2022.
- Doc.No. 110-0037765 Rev.A, Moxa IKS-6726A Series Data Sheet, dated 05-05-2023.

- Doc.No. 439059 Rev.B, Moxa IKS-6728A Series Data Sheet, dated 08-01-2024.
- Doc.No. 343879 Rev.E, Moxa Switch EDS-205A Series Data Sheet, dated 14-06-2023
- Doc.No. 470973 Rev.C, Moxa Switch EDS-208A Series Data Sheet, dated 14-06-2023
- Doc.No. 178001 Rev.F, Moxa Switch EDS-308 Series Data Sheet, dated 14-06-2023
- Doc.No. 352676 Rev.E, Moxa Switch EDS-316 Series Data Sheet, dated 14-06-2023
- Doc.No. 472200 Rev.B, Moxa Switch EDS-408A Series Data Sheet, dated 15-06-2023
- Doc.No. 472202 Rev.B, Moxa Switch EDS-518E Series Data Sheet, dated 15-06-2023
- Doc.No. 492309 Rev.A, Router Cisco C1100 Series Data Sheet, dated 30-12-2021.
- Doc.No. 110-0061805 Rev.A, Router Moxa EDR-8010 Series Data Sheet, dated 02-01-2024.
- Doc.No. 489196 Rev.C, Switch Cisco C1000 Data Sheet, dated 21-11-2023.
- Doc.No. 110-0018781 Rev.C, cJoy Operator Terminal Mk4 Datasheet, dated 08-05-2023.
- Doc.No. 486670 Rev.A, cWing Mk3 Datasheet, dated 07-02-2022.
- Doc.No. 449192 Rev.A, PSU TRIO-PS-2G/1AC/24DC/5/B+D Datasheet, dated 15-03-2019.
- Doc.No. 110-0000794 Rev.C, Digital Printer Datasheet, dated 28-11-2023.
- Doc.No. 110-0028959 Rev.A, Printer A4 Lexmark CS431dw Datasheet, dated 24-02-2023.
- Doc.No. 110-0011084 Rev.A, Printer A4 Lexmark CS521dn Datasheet, dated 13-09-2022.
- Doc.No. 418371 Rev.C, RCU602 Datasheet, dated 23-11-2023.
- Doc.No. 312740 Rev.C, RHUB200-5 Data Sheet, dated 25-11-2021.
- Doc.No. 351489 Rev.A, RMP201-8 Data Sheet, dated 17-11-2010.
- Doc.No. 312741 Rev.C, RSER200-4 Data Sheet, dated 16-06-2020.
- Doc.No. 110-0022770 Rev.A, RCU601 Remote Controller Unit Datasheet, dated 30-05-2023.
- Doc.No. 351488 Rev.A, RMP200-8 Data Sheet, dated 17-11-2010.

Hardware Module Descriptions:

- Doc.No. 300977 Rev.B, COP-05 ALC Panel Hardware Module Description, dated 17-10-2006.
- Doc.No. 300983 Rev.B, COP-05 BU-DP Panel Hardware Module Description, dated 19-01-2007.
- Doc.No. 300985 Rev.B, COP-05 Heading Wheel Panel Hardware Module Description, dated 19-01-2007.
- Doc.No. 300984 Rev.E, COP-05 Input Panel Hardware Module Description, dated 08-01-2024.
- Doc.No. 338386 Rev.A, COP-05 Standalone Trackball Hardware Module Description, dated 25-09-2009.
- Doc.No. 307003 Rev.B, Kwant Controls KC 06-K Joysticks Hardware Module Description, dated 27-07-2011.

2.2 - K-POS system

- Doc.No. 5367621 Rev.A - Class Approval Manual, dated 24-04-2024.
- Doc.No. 110-0048488 Rev.C, MC360 System Configuration Manual, dated Jan. 2024
- Doc.No. 300966 Rev.F, K-Pos Serial line Interface specification, dated Apr. 2022.
- Doc.No. 300967 Rev.H, K-Pos Interface Manual, dated Apr. 2022.
- Doc.No. 481031 Rev.A, MC340 System ConfigManual, dated 20-05-2021.
- Doc.No. 110-0059786 Rev.B, Release Notes DP 8.5.0 dated 27-06-2024.
- Doc.No. 5351079 Rev.A K-Pos DP-2 System Typical K-Pos Cable Layout, dated 09-11-2023.
- Doc.No. 5351080 Rev.A IJS System Typical K-Pos Cable Layout, dated 09-11-2023.
- Doc.No. 5426120 Rev.A FMEA Document.

Data Sheets:

- Doc.No. 472294 Rev.A, K-Pos DP2 Product data sheet, dated 2021
- Doc.No. 458313 Rev. B, K-Pos DP1 Product Datasheet, dated 2019.
- Doc.No. 110-0010936 Rev.A, K-Pos DP3 Product Datasheet, dated 2022.

Operator Manual:

- Doc.No. 110-0066721 Rev.B, K-Pos DP Operator Manual Release 8.5, dated June 2024.
- Doc.No. 110-0066744 Rev.B, K-Pos DPM Operator Manual Release 8.5, dated June 2024.
- Doc.No. 110-0066743 Rev.B, K-Pos PM Operator Manual Release 8.5, dated June 2024.
- Doc.No. 110-0066726 Rev.A, K-Pos Autopilot Mode Operator Manual Release 8.5, dated Apr. 2024.
- Doc.No. 110-0066727 Rev.A, K-Pos Auto Track Mode Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066722 Rev.B, K-Pos Follow Target Mode Operator Manual Release 8.5, dated June 2024.
- Doc.No. 110-0066729 Rev.A, K-Pos Seismic Track Mode Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066728 Rev.A, K-Pos Track Line Mode Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066730 Rev.B, K-Pos Offshore Loading Application Operator Manual Release 8.5, dated June 2024.
- Doc.No. 110-0066731 Rev.A, K-Pos Drilling Application Operator Manual Release 8.5, dated Apr. 2024.
- Doc.No. 110-0066732 Rev.A, K-Pos Pipelaying Application Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066737 Rev.A, K-Pos Dredging Application Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066738 Rev.A, K-Pos DP Analyses Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066739 Rev.A, K-Pos Backup DP system Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066862 Rev.A, K-Pos Heavy Lift Application Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066794 Rev.A, K-Pos Stand-alone Simulator Operator Manual Release 8.5, dated Apr. 2024.
- Doc.No. 110-0066844 Rev.A, K-Pos DP Recorder Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066843 Rev.A, K-Pos Chart Server Application Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066841 Rev.A, K-Pos Advanced Trainer Operator Manual Release 8.5, dated Mar. 2024.

- Doc.No. 110-0066742 Rev.A, K-Pos Power Application Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066740 Rev.A, K-Pos Alternative DP system Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0066788 Rev.A, K-Pos Built-in Simulator Operator Manual Release 8.5, dated Mar. 2024.
- Doc.No. 110-0072298 Rev.A, K-Pos DP Status Application Operator Manual Release 8.5, dated Apr. 2024.
- Doc.No. 110-0066863 Rev.A, IJS independent Joystick System Operator Manual Release 8.5, dated Apr. 2024.
- Doc.No. 110-0066864 Rev.A, cJoy DP-OT DP Operator Terminal Operator Manual Release 8.5, dated Apr. 2024.
- Doc.No. 110-0071432 Rev.A, cWing Remote Wing Terminal Operator Manual Release 8.5, dated Apr. 2024.

3. TEST REPORTS :

Nemko:

- Doc. No. 487708 Rev.03, Test Report No. E21088.03, dated 28-10-2021.
- Doc. No. 464983 Rev.C, Test Report No. E20096.02, dated 28-07-2020.
- Doc. No. 491274 Rev.B, Test Report No. REP019643, dated 17-01-2024.
- Doc. No. 412562 Rev.01, Test Report No. E15210.01, dated 18-11-2015.
- Doc. No. 489200, Test Report No. E21229.00, dated 04-03-2022.
- Doc. No. 492312, Test Report No. E21236.00, dated 01-06-2022.
- Doc. No. 110-0039194 Rev.A, Environmental Test Report No. REP006135B, dated 12-03-2024.
- Doc. No. 110-0063651 Rev.A, ENV Test Report No. REP019643, dated 17-01-2024.
- Doc. No. 110-0053579 Rev.A, Test report No. REP014885, dated 24-08-2023
- Doc. No. 110-0024697 Rev.A, Test Report No. REP004874, dated 06-01-2023.
- Doc. No. 482733 Rev 03, ENV Test Report No. E21059.03, dated 24-06-2021.
- Doc. No. 383971 Rev B, Test for Marine Type approval No. E15165.01, dated 28-04-2017.
- Doc. No. 110-0040379 Rev.A, ENV Test report No. REP008558, dated 16-03-2023.
- Doc. No. 469729, Test Report No. E18040.01, dated 27-10-2021.

Delta:

- Doc. No. 412374 Rev.A, Delta Test Report No. DANAK-19/16085 Revision A, dated 15-02-2016.
- Doc. No. 356219, Delta Test Report No. DANAK-1910639, dated 15-09-2009.
- Doc. No. 355954, Type approval testing No. DANAK-198195, dated 19-12-2005.
- Doc. No. 338108, Type approval testing No. DANAK-1910612-B, dated 15-09-2009
- Doc. No. 314243 Rev A, Type approval testing No. DANAK-198508, dated 17-10-2006.

DEKRA:

- Doc. No. 494556 Rev.A, Test Result for inspection No. 2110223R-E3012300001, dated 18-01-2021.
- Doc. No. 110-0068860 Rev.A, Test Report No. 2370018R-E3012100075-A, dated 03-10-2023.
- Doc. No. 110-0068865 Rev.A, Test Report No. 2110219R-E3012300001, dated 18-01-2021.
- Doc. No. 110-0068867 Rev.A, Test Report No. 1750281R-ITCEP16V00, dated 06-06-2017.
- Doc. No. 110-0068872 Rev.A, Test Report No. 2110234R-E3012300001, dated 18-01-2021.
- Doc. No. 110-0068874 Rev.A, Test Report No. 2110223R-E3012300001, dated 18-01-2021.
- Doc. No. 110-0068875 Rev.A, Test Report No. 2110219R-E3012300001, dated 16-07-2018.
- Doc. No. 110-0068877 Rev.A, Test Report No. 17A0322R-ITCEP16V00, dated 16-07-2018.
- Doc. No. 110-0068885 Rev.A, Test Report No. 2090946R-E3012300003, dated 30-09-2020.
- Doc. No. 110-0066090 Rev.A, Test Report No. 2110224R-E3012300001, dated 18-01-2021.

AUCOTEAM:

- Doc. No. 110-0043600 Rev.A, ENV Test Report No. 22-17667, dated 20-10-2022.

METEK:

- Doc. No. 110-0043603 Rev.A, EMC Test Report No. D/22/4888/01, dated 29-09-2022.

Teknologisk:

- Doc. No. 401595, Test report No. 3000-14-018241, dated 23-03-2015.

MS Testing:

- Doc. No. 110-0037824 Rev.A, Marine Type Approval Test Report No. TL15055 Issue 5, dated 18-11-2015.

Kongsberg:

- Doc. No. 110-0075840 Rev.A, FAT test report , dated 04-07-2024.

4. APPLICATION / LIMITATION :

- 4.1 - Bureau Veritas Rules for the Classification of Steel Ships/Offshore Units.
- 4.2 - BUREAU VERITAS Environmental Category, refer to above 1.4.
- 4.3 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zones.
- 4.4 - The product except cWing are not allowed to be installed on open decks.
- 4.5 - The printers are tested for radiated/conducted emission only.
- 4.6 - Only Hardware and Firmware / Software successfully tested together in compliance with the rules as referred to in cover page, according to the declaration of the manufacturer are covered by this certificate.
- 4.7 - Any modification of the hardware, firmware or software having an impact on the product performance or functionality has to be validated with type testing.
- 4.8 - In accordance with IACS UR E22 and as applicable to programmable devices for computer based systems of III, for each

ship application:

- Ship and offshore unit specific documentation is to be submitted including software documentation and categorization of the computer based system.

- Inspection and testing before installation onboard is to be performed under the surveillance of the Society.

4.9 - The installation shall comply with the Manufacturer's recommendation described in the above-referenced documentation.

4.10 - For project with additional class notation **DYNAPOS**, the documentation required on BV NR467, Pt F, Ch.11, Sec.5, table 1 shall be submitted for approval.

4.11 - Equipment covered by this Type Approval certificate has been tested according to requirements of IACS UR E10 rev 9.

4.12 - This certificate demonstrates the compliance of this equipment with the requirements of UR E27 Rev.1 Sep 2023.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above products are to be supplied by **Kongsberg Maritime AS** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

5.4 - For information, **Kongsberg Maritime AS** has declared to Bureau Veritas the following production site(s):

Kongsberg Maritime AS
POB 483
Kirkegårdsveien 45
3616 Kongsberg
NORWAY

Kongsberg Maritime AS
Bekkajordet 8A
3189 Horten,
NORWAY

Kongsberg Maritime China Ltd.
136 North Fute Road ,
Pilot Free Trade Zone
200131, Shanghai
CHINA

Kongsberg Maritime Inc.
145 James Drive East.
St. Rose
UNITED STATES OF AMERICA

Kongsberg Maritime Korea (KMK)
1058-7, Dalsan-ri, Jungkwan-myeon, Gijang-gun,
619-961, Busan,
Korea

KONGSBERG MARITIME PTE LTD
81 TOH GUAN ROAD EAST
#04-01, SECOM CENTRE
SINGAPORE

5.5 - The components listed in 1.4 have to be covered by a valid type approval certificate, issued by the Society.

6. MARKING OF PRODUCT :

6.1 - Trade name.

6.2 - Date of manufacture and serial number.

6.3 - Equipment type or model identification under which it was type-tested

6.5 - Bureau Veritas' Marks

7. OTHERS :

It is **Kongsberg Maritime AS's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***



Marine & Offshore

**BUREAU
VERITAS**

Attestation number: 77207/A0 BV

File number: TCE03_45

Product code: RA-CYBER

*This attestation is not valid when presented without the full attached schedule
composed of 7 sections*

REVIEW ATTESTATION

This attestation is issued to

Kongsberg Maritime AS

Kongsberg - NORWAY

for

CYBERSECURITY REVIEW

Kongsberg K-Pos (DP)

Requirements:

NR467 Bureau Veritas Rules for the Classification of Steel Ships

NR659 Bureau Veritas Rules on Cyber Security for the Classification of Marine Units

IACS UR E27 Rev.1(Sep 2023) Cyber resilience of on-board systems and equipment

This document is issued to attest that BUREAU VERITAS Marine & Offshore reviewed the technical documentation submitted for the equipment identified above. Details of this review are to be found in the "Schedule of Review" in the subsequent pages of this attestation.

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 29 Sep 2024,

Rune MARSTEIN

***This attestation was created electronically and is valid without
signature***



This attestation will not be valid if the applicant makes any changes or modifications to the product which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. This attestation is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgment, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

SCHEDULE OF REVIEW

1. PRODUCT DESCRIPTION :

Kongsberg DP (K-Pos DP) is described in the Type Approval Certificate 76866.

2. DOCUMENTS AND DRAWINGS :

Filename	Reference
KM-PRO-0120 Configuration Management Procedure_en.pdf	V1.0
KM-PRO-2025_KM_Alerts_and_Notifications_-_Preparation_and_Distribution_Safety_Bulletin_Service_Notice_and_Information_Letter_en.pdf	V1.0
KM-PROC-0080 Change management_en.pdf	V1.0
KM-GUI-6015_Patch_Management_en.pdf	V1.0
KM-GUI-0118 Guideline for Secure Development Lifecycle _SDLC_en.pdf	V1.0
110-0068347A_Paragon Hard Disk Manager - User Manual.pdf	V1.0
110-0062858E_K-Pos Test Procedure.pdf	V5.0
110-0062857C_K-Pos Security Capabilities.pdf	V3.0
110-0062856D_K-Pos System Topology.pdf	V4.0
110-0062855C_K-Pos Asset Inventory.pdf	V3.0
110-0055494A_Asset Inventory_Common Hardware.pdf	V1.0
110-0059786 B Release Notes DP 8.5.0.pdf	V2.0
110-0066721B_K-Pos_DP_OPM.pdf	V2.0
110-0066743B_K-Pos_PM_OPM.pdf	V2.0
110-0066744B_K-Pos_DPM_OPM.pdf	V2.0

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS :

Test report 'TCE03_45 test_report-1.0 rev1.pdf' by BV Surveyor on 03/05/2024:

The following subjects were investigated :

- SR 1.1 - HUMAN USER IDENTIFICATION AND AUTHENTICATION
- SR 1.3 - ACCOUNT MANAGEMENT
- SR 1.5 - AUTHENTICATOR MANAGEMENT
- SR 1.7 - STRENGTH OF PASSWORD-BASED AUTHENTICATION
- SR 2.3 - USE CONTROL FOR PORTABLE AND MOBILE DEVICES
- SR 2.5 - SESSION LOCK
- SR 2.8 - AUDITABLE EVENTS
- SR 3.6 - DETERMINISTIC OUTPUT
- SR 7.4 - CONTROL SYSTEM RECOVERY AND RECONSTITUTION

All tests were successful and elements demonstrating compliance are provided in the section "further information".

4. APPLICATION / LIMITATION :

4.1 This attestation is an intermediate document and does not constitute by itself a BV Type Approval Certificate. This attestation is limited to cyber resilience of product described in 1. as per UR E27 Rev. 1 dated Sept.2023.

4.2 This attestation is only valid when attached to the valid Type Approval Certificate 76866.

4.3 This attestation has been issued based on the review of documentation provided for the Type Approval Certificate 76866/A0 BV. It is manufacturer's responsibility to inform the Society of any modification or changes which could impact the validity of this attestation.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - For information Kongsberg has declared to Bureau Veritas the following production site(s):

**POB 483
Kirkegardsveien 45
3601 Kongsberg
NORWAY**

6. MARKING OF PRODUCT :

N/A

7. OTHERS :

7.1 - It is Kongberg responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

***** END OF ATTESTATION *****