TYPE APPROVAL CERTIFICATE

Certificate no.:
TAA00003S7
Revision No:
1

This is to certify:

that the Interface Unit

with type designation(s)
UPC 1-8, UPC 2-15

issued to
O Øverland AS
Molde, **Norway**

is found to comply with
IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results
IEC 61162-1 Ed. 6.0 (2024-04) Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners
IEC 61162-2 Ed. 2.0 (2024-04) Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 2: Single talker and multiple listeners, high-speed transmission

Application:

See page 2

Issued at **Høvik** on **2025-12-16**

This Certificate is valid until **2030-11-11**.
DNV local unit: **Mid-North Norway CMC**

Approval Engineer: **Steinar Kristensen**

for **DNV**

This document has been digitally signed and will therefore not have handwritten signature

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

UPC-series Serial Line Splitters are available in the following models:

Model name	Interfaces	Location
UPC 1-8	24VDC power input 1x RS-422 inputs 8x RS-422 outputs	Protected
UPC 2-15	Dual 24DC power inputs (main/ standby) with automatic failover switching Dual RS-422 inputs (main/ standby) with automatic failover switching 15x RS-422 outputs 1x relay alarm output	Protected

Application/Limitation

- The equipment shall be installed according to manufacturer's instructions

Type Approval documentation

DNV No	Document ID	Rev.	Description
2	31758-2	0	Report: Applica, Environmental test report for UPC 1-8 and UPC 2-15
3	31758-1	0	Report: Applica, EMC test report for UPC 1-8 and UPC 2-15
5	EDES-20251111-02	1.0	Manual: Øverland, UPC Serial Line Splitter User Manual
8	EDES-20251111-01	2.0	Report: Elektronikkdesign, Testing of O.Øverland UPC 1-8 and UPC 2-15 Serial Line Splitters according to IEC 61162-1, IEC 61162-2 and ITU X.27/V.11.

Tests carried out

- Environmental testing: IEC 60945 (2002)
- Serial interface testing: IEC 61162-1 (2024)
- Serial interface testing: IEC 61162-2 (2024)

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage

Periodical assessment

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.
The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com