

**EU RO MUTUAL RECOGNITION
TYPE APPROVAL CERTIFICATE**

This Certificate is issued to

Hatteland Display AS
NEDRE VATS, Norway

for

Monitors, Terminals

with type designation(s)

HD 24T22 MMD, HD 26T22 MMD, HD 27T22 MMD, HD 32T22 MVD, HD 55T22 MVD

The product is found to comply with

EU RO Mutual Recognition Technical Requirements for Display Monitors, Video Screens, Terminals

Intended service

Computers for control, monitoring, alarm, and safety functions subject to classification requirements.

The monitors have been verified for compliance with EU Mutual Recognition Technical Requirements.

Applicable tests for protected equipment according to IEC 60945 (Fourth edition - 2002) including Corrigendum 1 have additionally been verified.

This Certificate is valid until **2022-06-06**.

Issued at **Høvik** on **2017-06-07**

DNV GL local station: **Haugesund**

Approval Engineer: **Nils Jarem**

for **DNV GL**

.....
Odd Magne Nesvåg
Head of Section



Product description

Series X G2 Maritime Displays from Hatteland Display AS, as listed below:

Display Type No.	Description	Power supply options	Standard compass safe distance	Steering compass safe distance
HD 24T22 MMD	Maritime Multi Display	115/230VAC - 50/60Hz + 24VDC	140 cm	85 cm
HD 26T22 MMD	Maritime Multi Display	115/230VAC - 50/60Hz + 24VDC	190 cm	110 cm
HD 27T22 MMD	Maritime Multi Display	115/230VAC - 50/60Hz + 24VDC	190 cm	110 cm
HD 32T22 MVD	Multi Vision Display	115/230VAC - 50/60Hz + 24VDC	240 cm	145 cm
HD 55T22 MVD	Multi Vision Display	115/230VAC - 50/60Hz + 24VDC	500 cm	230 cm

The type approved configurations are described by the respective data sheets listed under Type Approval documentation.

Overview of tested firmware versions and revision history up to date of issue of this certificate are listed in Hatteland Display's Firmware statement No. LET_DNV20170301AK.DOC- rev1 listed under Type Approval documentation.

Manufactured by

Hatteland Display
 5578 Nedre Vats, Norway

Application/Limitation

The Type Approval covers all hardware listed under Product description. The display monitors are intended for use in alarm and monitoring systems subject to classification.

All monitors are available with touch screen functionality, which is beyond the scope of this approval. The touch screen hardware has been verified according to the DNV GL Class Programme for EU-RO-MR, but any use of touch functionality in classed applications needs to be verified through functional testing.

The dimming function is programmable and needs to be verified through functional testing when used in a system subject to classification.

Type Approval documentation

Type number Overview: [LET_DNV20170301AK 1](#)

User Manuals:

DNV GL No	Drw No	Rev	Title
26	INB101141-1	00_01/2016-10-24	User Manual HD 55 MVD

Data Sheets:

DNV GL No	Drw No	Rev
2	HD 24T22 MMD-xxx-Fxxx	00_01/2016-10-06
4	HD 27T22 MMD-xxx-Fxxx	00_02/2017-02-27
6	HD 26T22 MMD-xxx-Fxxx	00_02/2017-02-27
9	HD 32T22 MVD-MAX-AyGz	02/2017-02-24
13	HD 55T22 MVD-AAx-TOGP	01/2016-12-13
14	HD 55T22 MVD-MAX-CORP	00_08/2017-03-01

Sales Drawing:

DNV GL No	Drw No	Rev	Title
7	A009487	2015-03-09	a009487_hd32t22mvd-ma1-axgx
11	A009704	2016-10-14	a009704_hd55t22mvd-xxx-txxx

Job Id: **262.4-000075-2**
Certificate No: **MRA0000016**

Test reports:

DNV GL No	Drw No	Rev	Title
10	20931	1/2017-02-10	HD 32T22 MVD-MA1-AAGP
15	E16240.01	01/2017-02-09	HD 55T22 MVD-MA1-AOGP
16	20869	0/2016-11-29	HD 55T22 MVD-MA1-TOGP
17	21007	0/2017-02-23	HD 55T22 MVD-MA1-AOGP
18	21008	0/2017-01-25	HD 24T22 MMD-MA1-FAGP
19	2013-3122	0/2013-04-18	HD 24T21 MMC-MYI-HABA
20	21009	0/2017-02-10	HD 26T22 MMD-MA1-FAGP
22	20941	0/2016-10-27	HD 27T22 MEC-CGU-xABR
23	20885	0/2016-09-14	HD 27T22 MEC-CGU-AIBR

Statements:

DNV GL No	Drw No	Rev	Title
1	DOC205825-1-1	2	HD 24T22 MMD
3	DOC205871-1-1	1	HD 27T22 MMD
5	DOC205830-1-1	2	HD 26T22 MMD
8	DOC205831-1-1	2	HD 32T22 MVD
12	DOC205851-1-1	2	HD 55T22 MVD

EU RO MR type approval PQA scheme periodical assessment checklist, DNV GL Haugesund 2017-05-22.

Marking of product

Manufacturer's name: Hatteland Display
Type No.: Main type as listed under product description + 7 characters to describe the options
Unique serial No.
Date of manufacture: YYYYMMDD
Power supply ratings: Input voltage as listed under product description + power rating (W)

Other Conditions

The monitors have been verified for compliance with EU Mutual Recognition Technical Requirements version 0.3, dated 2016-04-01. Applicable tests for protected equipment according to IEC 60945 (Fourth edition - 2002) including Corrigendum 1 have additionally been verified.

Environmental test parameters

Temperature: -15°C and 55°C
Vibration: ±1mm / 0.7g
EMC: All locations including bridge and open deck
Enclosure: IP22 standalone, IP66 when sealed to console (IP ratings according to IEC 60529)
IP22 for HD 55T22 MVD

Job Id: **262.4-000075-2**
Certificate No: **MRA0000016**

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 annually and at renewal of this certificate.

END OF CERTIFICATE