

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER

Hatteland Display AS

PLACE OF

Amsosen

PRODUCTION

5578 Nedre Vats

Norway

DESCRIPTION

Computers and Displays

TYPE

Maritime Stand-alone Computer

HT B17 STD HT B18 STD HT 216 STD HT 416 STD HT C01 STD

Maritime Multi Computer

JH 15T17 MMC JH 19T14 MMC

Maritime Multi Display

JH 15T17 MMD JH 19T14 MMD JH 19T14 STD JH 20T17 MMD JH 27T11 MMD JH 22T11 MMD JH 23T14 MMD Military Display HM 20T07 MIL

Certificate No.

11/00008

Issue Date

8 March 2011

Expiry Date

7 March 2016

Sheet

1 of 2

T.C. Morrison London Design Support Office Lloyd's Register EMEA

Lloyd's Register EMEA 71 Fenchurch Street, London EC3M 4BS

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STANDARD

Environmental category ENV2 as defined in Lloyd's Register Type

Approval System Test Specification Number 1 2002

IACS E10

IEC 60945 4th Ed.

RATING

Maritime Stand-alone Computer

HT B17 STD 115/230V ac / 24V dc

HT B18 STD 115/230V ac / 24V dc

HT 216 STD 115/230V ac HT 416 STD 115/230V ac HT C01 STD 115/230V ac Maritime Multi Computer JH 15T17 MMC 115/230V ac

JH 19T14 MMC 115/230V ac Maritime Multi Display

JH 15T17 MMD 115/230V ac / 24V dc JH 19T14 MMD 115/230V ac / 24V dc JH 19T14 STD 115/230V ac / 24V dc JH 20T17 MMD 115/230V ac / 24V dc

JH 27T11 MMD 115/230V ac

JH 22T11 MMD 115/230V ac / 24V dc JH 23T14 MMD 115/230V ac / 24V dc

Military Display

HM 20T07 MIL 115/230V ac

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 11/00008 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.

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2 of 2

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Lloyd's Register EMEA (London Office)

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Page 1 of 2	
Document number 11/00008	
Issue number 1	

DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
8 March 2011	LDSO/ETS/TCM/WP3142100

LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 2002.

Issued to: HATTELAND DISPLAY AS

for: Computers and Displays

Type: HT B17 STD, HT B18 STD, HT 216 STD, HT 416 STD, HT C01 STD, JH 15T17 MMC,
 JH 19T14 MMC, JH 15T17 MMD, JH 19T14 MMD, JH 19T14 STD, JH 20T17 MMD,
 H 27T11 MMD, JH 22T11 MMD, JH 23T14 MMD, HM 20T07 MIL

TYPE APPROVAL CERTIFICATE No. 11/00008

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Hatteland Letter No. LRS20100609AK	09 Jun 2010
Hatteland Letter No. LRS20110217AK	17 Feb 2011
Request Form LR6606	09 Jun 2010
Inspection of Production Facilities Report	21 Feb 2011
Certifícate No. 2005-OSL-AQ-7703	18 Jun 2008
Certificate No. TW10/00563	01 Nov 2010
Certificate No. 12 100 17147 TMS	27 Aug 2009
Data Sheet HM 20T07 MIL	12 Nov 2009
User Manual No. INB100005-3	01 Jul 2008
Data Sheet HT 216 STD-Axxx	06 May 2010
User Manual No. INB100084-1	09 Jul 2009
Data Sheet HT 416 STD-Axxx	06 May 2010
User Manual No. INB100084-1	09 Jul 2009
Data Sheet HT B17 STD Axxx	05 Mar 2010
User Manual No. INB100032-5	11 Feb 2010
Drawing No. A001848	07 Apr 2009
Data Sheet HT B18 STD-Axxx	05 Mar 2010
Drawing No. A001848-1	07 Apr 2009
Data Sheet HT C01 STD-Axxx	09 Jul 2009
User Manual No. INB10042-2	28 May 2009
Data Sheet JH 15T17 MMC-xxx-Axxx	06 May 2010
User Manual No. INB100216-1	26 Feb 2010
Type Number Overview No. IND100780-2	03 Sep 2009
Data Sheet JH 15T17 MMD-xxx-Axxx	06 Oct 2008
User Manual No. INB10036-1	06 May 2010
Type Number Overview No. IND100780-1	15 April 2009
Data Sheet JH 19T14 MMC-xxx-Axxx	05 Mar 2010
User Manual No. INB100216-1	26 Feb 2010
Data Sheet JH 19T14 MMD-xxx-Axxx	06 May 2010
Hatteland Statement No. DOC100532-1	30 Oct 2008

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Page 2 of 2	
2 of 2	
Document number	
11/00008	
Issue number	
1	

DESIGN APPRAISAL DOCUMENT

Date 8 March 2011	Quote this reference on all future communications LDSO/ETS/TCM/WP3142100

2010
2008
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TEST REPORTS

Report No. 2007-3008	13 Mar 2007
Report No. 2009-3283	19 May 2009
Report No. 2009-3284	19 May 2009
Report No. 2009-3601	22 Feb 2011
Report No. 2009-3161	17 Mar 2009
Report No. 2010-3247	10 May 2010
Report No. 2009-3442	11 Aug 2009
Report No. 2009-3442	11 Aug 2009
Report No. 2008-3511	22 Oct 2008
Report No. 2008-3146	22 Feb 2011
Report No. 2010-3124	20 Apr 2010
Report No. 2008-3464	26 Sep 2008
Report No. E09749.01	5 Nov 2009
Report No. E10092.01	20 Apr 2010

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

Tony Morrison

Electrotechnical Systems

Comon

London Design Support Services

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