DNV-GL

Certificate No: **TAA000011H** Revision No:

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Personal Computer

with type designation(s)

Totem PC TPC 1.3

Issued to

Totem Plus Ltd.Ramat Hasharon, Israel

is found to comply with

DNV GL rules for classification - Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Temperature A
Humidity B
Vibration A
EMC B

Enclosure Required protection according to the Rules to be provided upon installation on

board.

Issued at Hamburg on 2017-06-14

This Certificate is valid until 2022-06-13.

DNV GL local station: Limassol

Approval Engineer: Andrea Grün

Digitally Signed By: Rinkel, Marco for **DNV GL** Signing Date: 2017-06-21 Location: Hamburg - On behalf of

> Joannis Papanuskas Head of Section

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.

Revision: 2016-12



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Job Id: **262.1-024720-1** Certificate No: **TAA000011H**

Revision No: 1

Product description

Totem PC Type TPC 1.3, EMC tested with following components:

- Motherboard AIMB-766

- EMC filter EMI Filter Qultek Electronics Corp. P/N 852-03/001

Power SupplyPower
 DVD Writer
 Hard Disk
 Win PW-300ATXE-12V
 LG-40 or Sony Nec
 Seagate Barracuda

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV GL Rules for Ships/Offshore Standards Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

Each delivery of the application system is to be certified according to Pt.4 Ch.9 Sec.1. The certification test is to be performed at the manufacturer of the application system according to an approved test program before the system is shipped to the yard. After the certification the clause for application software control will be put into force.

Type Approval documentation

User's Manual Totem PC September 2009

Test reports:

DNV 2002-3293 Environmental

TSIOI 8412318922 EMC

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, November 2016.

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 after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE

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