

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Personal Computer**with type designation(s)
I330 and I570 Embedded Automation Controller Box PC

Issued to

**WinMate INC.
New Taipei City, Taiwan**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
DNV GL offshore standards
DNV GL rules for classification – Ships**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	A

This Certificate is valid until **2021-07-03**.Issued at **Hamburg** on **2016-07-04**DNV GL local station: **Kaohsiung**Approval Engineer: **Andrea Grün**for **DNV GL**

Duy Nam Le
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.

Job Id: **262.1-006083-4**
Certificate No: **TAA00000JJ**

Product description

WinMate INC. Embedded Automation Controller Box PCs as listed below:

Model	Description	Rating
I330EAC-201	I330 Embedded Automation Controller Box PC	24V DC, 4A
I570EAC-201	I570 Embedded Automation Controller Box PC	24V DC, 4A
I330EAC-ID3	I330 Embedded Automation Controller Box PC	24V DC, 4A

The type approved configuration is described by the respective data sheets.

Application/Limitation

The type approval does not cover optional mounting kits.

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 Pt.4 Ch.9 Control and Monitoring Systems.

Product certificate

If specified in the Rules, ref. Pt.4 Ch.9 Sec.1, the control and monitoring system in which the above listed hardware is used shall be delivered with a product certificate. For each such delivery the certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force.

Clause for application software control

All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV GL for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Compass safe distances:

Model	Standard Compass Safe Distance	Steering Compass Safe Distance
I330EAC-201	80 cm	50 cm
I570EAC-201	70 cm	50 cm
I330EAC-ID3	80 cm	50 cm

Type Approval documentation

Users Manual:	Marine EAC Ver.1.4 for I330/I370/I530/I570EAC-201, I330EAC-ID3/IV3, IS81EAC-201	
Data Sheets:	Model # I330EAC-201	Rev.1.3,
	Model # I570EAC-201	Rev.1.3,
	Model # I330EAC-ID3	Rev.1.5

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Test Reports: I330, I570: DNV 2008-3418 Rev.01
I330: SGS # HC70238/2008, HC70240/2008, HC70242/2008, HC70245/2008, HC70246/2008, HC70248/2008, HC70250/2008, HC70252/2008, HC70254/2008, HC70256/2008, HC70262/2008, HCO0255, QuieTek # SN0806032 dated 2008-09-12, QuieTek # 086378R-MISC V2.0 dated 2008-09-19
I570: SGS # HC70239/2008, HC70241/2008, HC70243/2008, HC70244/2008, HC70247/2008, HC70249/2008, HC70251/2008, HC70253/2008, HC70255/2008, HC70257/2008, HC70263/2008, HCO0239, QuieTek # SN0807013 dated 2008-09-12, QuieTek # 087160R-MISC V1.0 dated 2008-09-19
I330EAC-ID3 (documentation supplementary to I330): DNV 2013-3034 Rev.0, SGS # HCO0035/2012, HCO0107/2012, HCO0229/2012, HCO0230/2012, HCO0231/2012, HCO0232/2012, HCO0233/2012, HCO0234/2012, HCO0235/2012, HCO0236/2012, HCO0237/2012, HCO0238/2012, HCO0239/2012, QuieTek # SN1211049 dated 2013-01-29, QuieTek # 12A137R-ITCEP26V01 dated 2012-12-25

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, November 2015, also covering IACS Unified Requirements E10 Rev.5.

Tested as protected equipment according to relevant parts of IEC 60945, 4th edition.

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 at least every 2.5 year and at renewal of this certificate.

END OF CERTIFICATE