

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	Elektronik-Systeme Lauer GmbH & Co.KG
PLACE OF PRODUCTION	Kelterstrasse 59 72669 Unterensingen Germany
DESCRIPTION	Monitors and Panel PC for bridge and automation application
TYPE	Monitor: MTe ① ② ③ Nautic ④ Panel PC: EPC ① ② C2D Nautic ④ ① - Display Type: T=Touch, otherwise=Glasfront ② - Display Size: 150=15", 170=17", 190=19" ③ - Communication Type: E=Ethernet, otherwise=USB ④ - Power Supply Type: AC=230V, DC=24V Panel PC comprises: <ul style="list-style-type: none">- Storage Medium=CF-Card or HDD- User Memory= 1GB, 2GB or 4GB RAM- CPU Type= Intel® Core™ 2Duo CPU T7500 @ 2.20GHz- System Software=Windows XP Professional
APPLICATION	Marine, offshore and industrial applications for use in environmental categories ENV1 and ENV2 as defined in Lloyd's Register's Type Approval System, Test Specification Number 1 - 2002.

Certificate No.	10/20008
Issue Date	09 March 2010
Expiry Date	08 March 2015
Sheet	1 of 2


Ronny Lehmann
Hamburg Design Support Centre
Lloyd's Register EMEA

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

Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

ADDITIONAL TESTS

- Low Temperature test (-15°C/16hrs)
- Dry Heat test (+55°C/16hrs)
- Sound Power Test (ISO 9614-2):
 - Alarm Measurement = 80dB
 - Noise Measurement = 51dB (for Panel PCs only)
- Compass Safe Distance (EN60945, Section 11.2)

DESIGN CODE

Manufactures Specification

OTHER CONDITIONS

Final arrangements of the system have to be in compliance with Lloyd's Register Rules and Regulations.

Type Approval of Products according to Test Specification No. 1 is essentially Type Approval of hardware. Examination of software aspect is restricted to functional operation as demonstrated in the Performance Test.

"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. ETS 22744-10 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	10/20008
Issue Date	09 March 2010
Expiry Date	08 March 2015
Sheet	2 of 2


Ronny Lehmann
Hamburg Design Support Centre
Lloyd's Register EMEA

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

Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.