



# DET NORSKE VERITAS

## TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **E-11496**

Holder of Certificate

**Eaton Industries France SAS**  
**MONTBONNOT SAINT MARTIN, France**

This is to certify that the  
**UPS**

with type designation(s)  
**EX 1500 RT 2U Marine**

is found to comply with  
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application  
**UPS for use in ships and offshore units**

**Høvik, 2012-01-18**  
for **Det Norske Veritas AS**

This Certificate is valid until  
**2015-12-31**

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**Marit Laumann**  
**Head of Section**

DNV local office:  
**Le Havre**

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**Nicolay Horn**  
**Surveyor**

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.

## Product description

UPS for computer services. Including batteries of 12 V lead acid types. Equiped with automatic by-pas and with temperature compensated charging.

Type	Input Voltage	Output power	Batteries	Enclosure
EX 1500 RT 2U	1 ph 100 - 284 V AC, 40 Hz - 70 Hz	1500 VA / 1300 W	3 x 12 V - 9 Ah	IP 20

## Classification according to DNV Sfc 2.4

Temperature class	A
Vibration class	A
Humidity class	A
Enclosure class	A

## Manufactured by

Lianzheng Electronic (Shenzhen) Co LTD  
4 LiuFANG RD, BLK 67, BAO'AN  
Shenzen Guangdong  
CHINA

## Responsibility

The Holder of certificate takes the responsibility that both design and production are in compliance with the Rules and standards listed on page 1 and 2 of this Type Approval Certificate.

## Application/Limitation

For supply to a single cosumer, or supply to several of non important consumers.

The output current will be deacresed if operating at 45 °C for longer periode or with restricted ventilation. Derating with 2.5 % / °C > 40 °C.

Supplier's installation instructions to be followed. End user is responsible for correct IP protection wrt. location and use. The installation and use shall be in accordance with DNV Rules.

## Type Approval documentation

## Tests carried out

Type tests in accordance with IEC 62040-1 (2008): Uninterruptible power systems (UPS) - Part 1: General and safety requirements for UPS.

Environmental testing according to DNV Standard for Certification No. 2.4 (2006-04) Class A: Low temperature, Dry heat, Vibration, Humidity/ Damp heat in and EMC.

## Marking of product

EATON – Model no. – EX 1500 VA – UPS input – UPS output.

## Certificate Retention Survey

Certificate No.: E-11496  
File No.: 822.60  
Job Id.: 262.1-008202-2

The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Production Sample Tests (PST) and Routines (RT) checked (if not available tests according to PST and RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE