

**OIML Member State**  
The Netherlands

Number R60/2017-A-NL1-21.41  
Project number 2414296  
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Issuing authority NMI Certin B.V.  
Person responsible: M.Ph.D. Schmidt

Applicant and Manufacturer Ningbo AIEN Electronics Co., Ltd.  
No. 66 Xiantan Road, Langxia Street  
Yuyao City, Ningbo  
China

Identification of the certified type A **shear beam load cell**, with strain gauges.  
Registered trade name : AIEN  
Type : HSQB

Characteristics See next page

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**OIML R 60** - Edition 2017 (E) for accuracy class C

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified.  
This Certificate does not bestow any form of legal international approval.

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Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**  
24 December 2021

#### Certification Board

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The conformity was established by the results of tests and examinations provided in the associated OIML Report(s):

- No. NMI-2414296-01 dated 24 December 2021 that includes 51 pages.

## Characteristics of the load cell:

Characterization of load cell capabilities	Analog-passive load cell
Maximum capacity ( $E_{max}$ )	1000 kg up to and including 5000 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	3 mV/V
Maximum number of load cell intervals (n) <sup>(1)</sup>	4000
Ratio of minimum LC Verification interval <sup>(1)</sup> $Y = E_{max} / V_{min}$	20000
Ratio of minimum dead load output return <sup>(1)</sup> $Z = E_{max} / (2 * DR)$	4000
Input impedance	400 $\Omega \pm 20 \Omega$
Temperature range	-10 °C / + 40 °C
Fraction $p_{LC}$	0,7
Humidity Class	CH
Safe overload	150 % of $E_{max}$
Output impedance	352 $\Omega \pm 3 \Omega$
Recommended excitation	10 V AC / DC
Excitation maximum	15 V AC / DC
Transducer material	Alloy steel
Atmospheric protection	Hermetically welded

Remark:

1. The characteristics for  $n_{max}$ , Y and Z can be reduced separately.

Each load cell produced is provided with an accompanying document with information about its characteristics.

The above identified Type (represented by the sample(s) identified in the OIML Test Report) have been found to comply with the additional national requirements established by the United States of America (NIST Handbook 44 and NCWM Publication 14), included in the Utilizer Declaration:

- R 60 OIML-CS rev.2 Additional requirements from the United States Accuracy class III L;
- R 60 OIML-CS rev.2 Additional requirements from the United States Marking requirements.