



Member State of OIML  
United Kingdom of Great Britain  
and Northern Ireland

OIML Certificate No  
R61/2004-GB1-17.01

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**  
Person responsible: **Mannie Panesar – Head of Technical Services**  
Applicant: **CAS Corporation  
#262, Geurugogae-ro  
Gwangjeok-myeon  
Yangju-si  
Gyeonggi-do  
Republic of Korea**  
Manufacturer: **The applicant**  
Identification of the certified pattern: **CI-600 Series**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

### **OIML R 61 - Edition 2004(E) for Reference accuracy class 0.2**

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Issue Date: **02 March 2017**

**G Stones**  
**Technical Manager**  
*For and on behalf of the Head of Technical Services*

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NMO is part of the Regulatory Delivery directorate within the Department for Business, Energy & Industrial Strategy



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The conformity was established by testing and examinations described in the associated Evaluation Report P02047 which includes 16 pages.

### **Characteristics of the instrument:**

#### Description:

This pattern of an automatic gravimetric filling instrument for dispensing predetermined loads of powdered, granular or liquid materials consists of a feeding device, a weighing unit, and a CI-600 Series weighing controller.

#### Main features:

- Gravity feeder
- Gravity feeder with agitator
- Single screw or double screw feeder
- Belt feeder
- Vibratory feeder

#### Devices:

- Initial zero setting device on power up
- Semi-automatic zero setting
- Zero tracking (optional)
- Semi-automatic subtractive tare weighing
- Preset tare
- Gross/Net indication
- Zero-indicator
- Indication of stable equilibrium
- Net indicator
- Gravity compensation
- Hold function
- Soft function keys (F1, F2 and F3)
- Target weight
- Memory storage

#### Load cell:

Any compatible load cell(s) may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) issued for the load cell.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules, and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to R76 has been conducted on this load cell.
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation at the time of verification.
- The load cell transmission conforms to a standard type.

Technical characteristics:

Power supply	100-240 VAC, 50/60 Hz
Maximum number of scale intervals	10,000, single or dual-interval
Scale interval	$\geq 1$ g
Reference accuracy class, Ref(x)	0.2
Maximum Tare value	- Max
Maximum Preset Tare value	- Max (single interval) - Max <sub>1</sub> (dual interval)
Load cell excitation voltage	5 VDC
Minimum load cell impedance	43 $\Omega$
Maximum load cell impedance	1100 $\Omega$
Minimum input voltage per verification scale interval	0.5 $\mu$ V
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	16 mV
Fraction of maximum permissible error	P <sub>i</sub> = 0.5
Operating temperature range	- 10 °C to + 40 °C
Climatic environment	Closed, non-condensing
EM Classification	E2
Load cell cable (from indicator to load cell junction box) - Maximum length	183 m/mm <sup>2</sup> (6-wire configuration)

Software:

The software is held in firmware on the circuit board, and has the identification number V1.xx, with xx reflecting non-legally relevant changes. Download of software and access to the legally relevant parameters is only possible via a jumper located on the circuit board.

The software version number is displayed at power-up.

Interfaces:

The instrument may have the following interfaces:

- Load cell connection
- RS232/485
- Relay In/Out (4 inputs, 6 outputs) (CI-605A)
- Relay In/Out (6 inputs, 8 outputs) (CI-607A)
- Analogue Out (CI-601A, CI-605A, CI-607A)

Operation:

The operator enters or selects the predetermined (target) weight and other operational inputs via the keys on the front of the controller. The controller operates the filling instrument in response to signals from the load cell(s) and plant sensors.

The instrument performs an automatic zero-setting (gross weighing) or tare-setting (net weighing) at the start of automatic operation, as part of every automatic weighing cycle.

**CERTIFICATE HISTORY**

<b>ISSUE NO.</b>	<b>DATE</b>	<b>DESCRIPTION</b>
R61/2004-GB1-17.01	02 March 2017	Certificate first issued.
-	-	No revisions have been issued.