



National  
Measurement &  
Regulation Office



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

OIML Certificate No  
R76/1992-GB1-10.04  
Revision 4

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement and Regulation Office**  
Person responsible: **Paul Dixon – Director, Certification Services**  
Applicant: **CAS Corporation  
#262, Geurugogae-ro  
Gwangjeok-myeon  
Yangju-si  
Gyeonggi-do  
Republic of Korea**  
Manufacturer: **The applicant**

Identification of the  
certified pattern: **SW 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 76 - Edition 1992(E) for accuracy class: [III]**

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.

This revision replaces previous versions of the certificate.

Issue Date: **28 July 2015**  
Reference No: **T1128/0107**

**P R Dixon**  
**Certification Services Director**  
*For and on behalf of the Chief Executive*



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The conformity was established by tests and examination described in the associated pattern evaluation report P00945 which includes 24 pages.

The manufacturer of the certified pattern is the Applicant, or the following companies:

Shanghai CAS Electronics Co., Ltd,  
Maixinroad 448, Xinqiaozhen, Songjiangqu,  
Shanghai, China

CAS Elektronik San. Tic. A.S.  
Yukari Dudulu, Bostanci Cad. Mevdudi Sokak No: 34  
Umraniye-Istanbul / Turkey

Characteristics of the instruments:

Class III, mains or battery-operated, self-indicating, non-automatic weighing instruments designated SW Series and comprising the ED, ER PLUS, ER PLUS-M, SW-1, ER JR and PW-II models and their variants.

Single-interval instruments:

Model	ED				ER PLUS / ER PLUS M		
Max (kg)	3	6	15	30	6	15	30
Min (g)	20	40	100	200	40	100	200
e (g)	1	2	5	10	2	5	10

Model	SW-1S, SW-1C, SW-1W, SW-1LR, SW-1WR							
Max (kg)	2	3	5	6	10	15	20	30
Min (g)	20	20	40	40	100	100	200	200
e (g)	1	1	2	2	5	5	10	10

Model	ER JR			PW-II		
Max (kg)	6	15	30	2	5	10
Min (g)	40	100	200	20	40	100
e (g)	2	5	10	1	2	5

Dual-interval instruments:

Model	ED				ER PLUS / ER PLUS M		
Max (kg)	1.5 / 3	3 / 6	6 / 15	15 / 30	3 / 6	6 / 15	15 / 30
Min (g)	10	20	40	100	20	40	100
e (g)	0.5 / 1	1 / 2	2 / 5	5 / 10	1 / 2	2 / 5	5 / 10

Model	SW-1S, SW-1C, SW-1W, SW-1LR, SW-1WR							
Max (kg)	1 / 2	1.5 / 3	2.5 / 5	3 / 6	4 / 10	6 / 15	10 / 20	15 / 30
Min (g)	10	10	20	20	40	40	100	100
e (g)	0.5/1	0.5/1	1/2	1/2	2/5	2/5	5/10	5/10

Model	ER JR			PW-II		
Max (kg)	3 / 6	6 / 15	15 / 30	1 / 2	2.5 / 5	4 / 10
Min (g)	20	40	100	10	20	40
e (g)	1 / 2	2 / 5	5 / 10	0.5 / 1	1 / 2	2 / 5

Construction:

- Plastic construction
- Operator's keypad
- Stainless steel load receptor
- Level indicator
- Operator and customer display

Load cell:

The load cell is a CAS load cell, model SW.

Devices:

- Initial zero setting device ( $\leq 20\%$  of Max)
- Semi-automatic zero setting device ( $\leq 4\%$  of Max)
- Zero tracking device ( $\leq 4\%$  of Max)
- Zero indicator
- Net indicator
- Semi-automatic subtractive tare balancing device
  - $T \leq - \text{Max}$  (single-interval instruments)
  - $T \leq - \text{Max}_1$  (dual-interval instruments)
- Gravity compensation
- Check weighing and weighing unstable samples modes (SW-1S, SW-1C, SW-1W, SW-1LR, SW-1WR, ER JR, PW-II and ED Models only)
- Processing of non-weighed items
- Price computation (weighed and non-weighed items)
- Totalisation (when connected to a printer)
- Price Clear and Tare Clear functions
- 3-point calibration

Technical data:

Any compatible CE-marked mains adaptor may be used to supply 12 V DC (ED, ER PLUS, SW-1WR /1LR and ER JR Models) or 9 V DC (PW-II Model and SW-1S/1C/1W) to the instrument.

The instrument may also operate on an integrated rechargeable 6 V 3.6 Ah battery (ED, ER PLUS and ER JR Models), integrated 4 x 1.5 V D type batteries (ER JR Model), integrated 6 x 1.5 V D type batteries (SW-1S/1C/1W Model), integrated rechargeable 6 V 1.3 Ah battery (SW-1LR Model), integrated rechargeable 6 V 3.3 Ah battery (SW-1WR Model), or integrated 6 x 1.5 V AA batteries (PW-II Model).

The temperature range for the instruments is -10 to +40 °C.

Software:

The software is designated V2.xx.x or V3.xx.x, with xx.x reflecting minor, non-legally relevant modifications. This information is displayed at power up.

Download of software download via the RS232 communication port requires access to the main board (jumper JP1). Access to the board is prevented by the following sealing measures.

Sealing:

Access to the load cell and calibration switch is prevented by sealing the enclosure using a wire-and-seal or tamper-evident sticker.

Alternative manufacturer:

CAS (Zhejiang) Electronics Co., Ltd  
99# Changjiang Road  
Jiashan County  
Zhejiang Province  
China

Model variants and designation:

Model	Type	Display	Variant designation	Remarks
ED	Standard	LCD	ED	
ER PLUS	Standard	LCD	ER PLUS-C	
			ER PLUS-CB	With backlight
			ER PLUS-CP	
			ER PLUS-CBP	With backlight
	Pole display	VFD	ER PLUS-F	
			ER PLUS-FP	
	Standard	LED	ER PLUS-E	
			ER PLUS-EP	
	Pole display	LED	ER PLUS-MEP	Direct PLU keypad
		LCD	ER PLUS-MCP	Direct PLU keypad
ER PLUS-MCBP			Direct PLU keypad, with backlight	
SW-1	Standard	LCD	SW-1S	
	Standard		SW-1C	Check weighing and counting modes
	Standard		SW-1W	Waterproof
	Standard	LED	SW-1WR	Waterproof, rechargeable battery
	Standard	SW-1LR	Rechargeable battery	
ER JR	Standard	LCD	ER JR	
			ER JR-B	With backlight
	Pole display		ER JR-P	
			ER JR-BP	With backlight
PW-II	Standard	LCD	PW-II	

Unstable weights:

The instrument may use ECR protocols allowing transmission of unstable weights.

These protocols can be used for transmission of weights to a printer, provided unstable weights are designated as such on the printout. This shall be documented in the User Manual.

This protocol shall not be used for transmission of weights to an EPOS device, unless the EPOS is fitted with a device preventing the processing of unstable weights.

**Certificate History**

<b>ISSUE NO.</b>	<b>DATE</b>	<b>DESCRIPTION</b>
R76/1992-GB1-10.04	27 May 2009	Certificate first issued
R76/1992-GB1-10.04 rev 1	04 September 2012	Load cell and technical data sections added.
R76/1992-GB1-10.04 rev 2	12 May 2014	Single-interval instruments added. Max tare value added to devices section. Sealing section added.
R76/1992-GB1-10.04 rev 3	19 May 2014	Applicant's address changed from : 19 Ganap-Ri Gwangjuk-Myoun Yangju-Si Gyeonggi-Do 482-841 Republic of Korea Alternative manufacturer added.
R76/1992-GB1-10.04 rev 4	28 July 2015	Steel construction corrected to plastic construction. Non-weighed items, price computation, totalisation and Price/Tare Clear and 3-point calibration added. Power supply for SW-1 series specified in technical data section. Software section added. Model variants and designation section added. Unstable weights section added.