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EC Type-Approval Certificate UK 3008

Issued by:

National Measurement Office Notified Body Number 0126

In accordance with the requirements of the Non-Automatic Weighing Instruments Regulations 2000 (SI 2000/3236) which implement, in the United Kingdom, Council Directive 2009/23/EC, this EC type-approval certificate has been issued to:

A&D Instruments Ltd 24 Blacklands Way Abingdon Business Park Abingdon Oxfordshire OX14 1DY United Kingdom

in respect of a Class III, Non-Automatic Weighing Instrument designated the SJ-3000WP, SJ-6000WP, SJ-15KWP, or SJ-30KWP and having the following characteristics:

Type	SJ-3000WP	SJ-6000WP	SJ-15KWP	SJ-30KWP	
Class	III				
Max	1 500 / 3 000 g	3 000 / 6 000 g	6 / 15 kg	15 / 30 kg	
е	0.5 / 1 g	1 / 2 g	0.002 / 0.005 kg	0.005 / 0.01 kg	
n	≤ 3 000				
Min	10 g	20 g	0.04 kg	0.1 kg	
Max Tare	3 000 g	6 000 g	15 kg	30 kg	

The necessary data (principal characteristics, alterations, securing, functioning etc) for identification purposes and conditions (when applicable) are set out in the descriptive annex to this certificate.

Issue Date: 04 February 2015
Valid Until: 03 February 2025
Reference №: TS1201/0127

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Signatory: G Stones for Chief Executive

U K A S
PRODUCT
CERTIFICATION



Descriptive Annex

1 INTRODUCTION

The A&D Instruments Ltd SJ-WP series of instruments are battery powered, Class III, Non-Automatic Weighing Instruments, fitted with a semi-automatic zero setting and subtractive tare balancing device, and a semi-automatic calibration and gravity compensation device (see Figure 1).

2 DESCRIPTION

2.1 Construction

2.1.1 Mechanical

Main features:

- 259 mm x 236 mm ABS plastic lower-case unit supports the load cell and sensor unit. The unit also houses the main board, which incorporates the seven segment LCD display.
- Keypad consisting of four function keys.
- Load cell

2.1.2 Load cell

The load cell is available in four different capacities:

The scales approved under this certificate may use the following load cells:

Scale Model	Load Cell Model	Manufacturer	Max Capacity (kg)	E _{max} (kg)
SJ-3000WP	1LC197-3000	- A&D	3	6
SJ-6000WP	1LC197-6000	ELECTRONICS	6	12
SJ-15KWP	1LC197-15K	(Shen Zhen) CO.,	15	30
SJ-30KWP	1LC197-30K	LTD	30	60

2.1.3 Keyboard

The keyboard consists of four functional keys (see Figure 1):

- Combined ON/OFF/ZERO touching the ON/OFF switch will toggle the instrument on or off.
 - touching the ZERO switch sets the display to zero.
- SAMPLE touching this switch changes the flashing digit.
- UNITS touching this switch changes the unit of weight.
- TARE touching the switch subtracts the tare (container) weight placed on the weighing pan.

2.1.4 Additional switches

These are accessed from underneath the unit, underneath the sealing plate which is secured (see 7.2).

- CALIBRATION allows entry to the calibration mode.
- RESET resets the electronic conduction for the touch keys.

2.1.5 Display

The seven segment LCD display provides five 2.6 cm high, seven segment fields to display the weight value, and an additional field to display the units.

Up to 4 enunciators can be displayed, to indicate stable, polarity, net or zero. The STABLE indicator indicates when the reading is stable. The NET indicator indicates when NET weight is displayed when the tare function is used. The ZERO indicator indicates when the scale zero is correct. The polarity indicator indicates that the reading is negative when illuminated and positive when not illuminated.

2.1.6 Circuitry

All signal processing and communications with the load cell are achieved from the control circuitry within the main unit.

2.2 Operation

2.2.1 Switch on

On power up the instrument displays all segments for a few seconds and the 0 will be displayed.

2.2.2 Automatic power-off function

If the unit is left on and the stable indicator is displayed, an automatic power-off function turns the power off after approximately five minutes. To disable this function or to change the time to turn off, turn unit off. Press and hold the TARE key and press POWER key and release the Power key P-1.xx will be displayed. Followed by PoFF 1, use the UNITS and SAMPLE keys to select and change the value. TARE key to store. Press ON/OFF key to return back to weighing mode.

2.2.3 Initial zero setting

Initial zero setting is possible between $\pm 10\%$ of max capacity.

2.2.4 Zero tracking

Zero tracking operates between $\pm 2\%$ of maximum capacity. The maximum speed of tracking is 0.5 d per second.

2.2.5 Semi-automatic calibration and gravity compensation device

In calibration mode the instrument may be calibrated using a weight or by entering a local gravity value.

2.2.6 Over range

Loads greater than nine divisions above maximum capacity result in an error code shown as 'E' in the centre of the weight display. The stability enunciator is blanked for unstable loads.

3 TECHNICAL DATA

3.1 Six D cell R20P / LR20 batteries are used to supply DC power to the instrument.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

There are no peripheral devices present.

5 SOFTWARE

The scale configuration and calibration parameters are stored in the EEPROM. The display indicates the software version number by, when power is off, press and hold Tare key and press POWER key and release the Power key. The software version will be in the format of "P-1.xx", where "xx" represents changes to the non-legally-relevant software.

6 APPROVAL CONDITIONS

6.1 Legends

6.1.1 The instrument bears the following legends (see Figure 2):

Max

Min

e =

6.1.2 The instrument shall bear the following legends:

CE mark

Verification mark

Green M Class

Serial number

Manufacturers mark or name

Certificate number

6.1.3 The SJ-WP series of instruments are not to be used for direct sales to the public.

7 LOCATION OF SEALS AND VERIFICATION MARKS

- **7.1** The data plate, green M sticker and the verification mark are mounted on the right hand side of the instrument (see Figure 2).
- **7.2** A wire and lead seal sealing the two entry ports on the bottom of the instrument prevent access to the load cell, main circuit board and calibration lock switch. (see Figure 3).

The wire and lead seal may have the mark of a verification officer, or alternatively, the manufacturers mark.

8 AUTHORISED ALTERNATIVES

9 ILLUSTRATIONS

Figure 1 General View Figure 2 Legends

Figure 3 Example of data plate and CE marking

Figure 4 Sealing diagram

10 CERTIFICATE HISTORY

Issue №.	Date	Description
UK 3008	04 February 2015	Type approval first issued

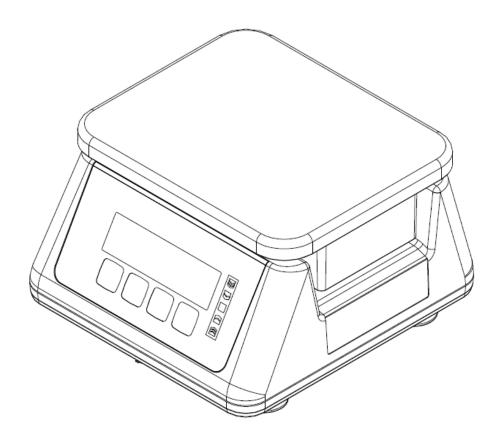


Figure 1 General View

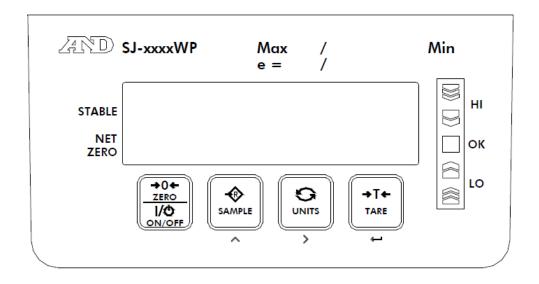


Figure 2 Legends

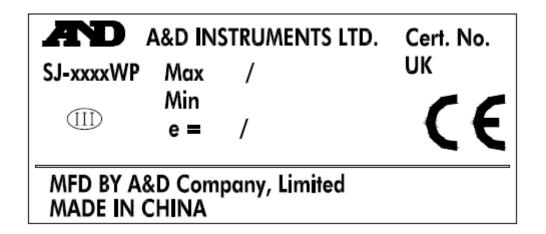


Figure 3 Example of data plate and CE marking

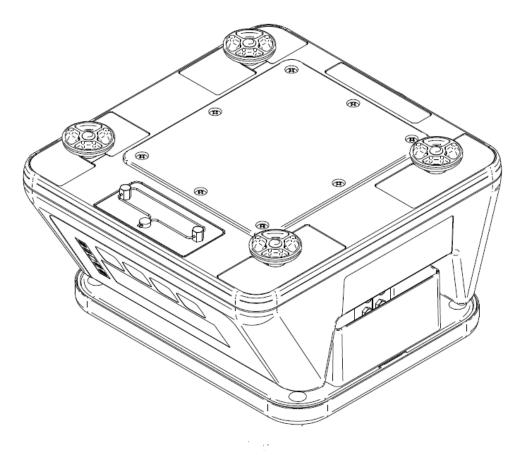


Figure 4 Sealing diagram

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