

EU-type examination certificate UK/0126/0247

Issued by:

NMO

Notified Body Number 0126

In accordance with the requirements of the Measuring Instruments Regulations 2016 (S.I. 2016 No. 1153) which implement, in the United Kingdom, Council Directive 2014/32/EU, this EU-type examination certificate has been issued to:

**Parcel Kiosk Limited
Invision House, Wilbury Way,
Hitchin SG4 0TY,
United Kingdom**

In respect of an automatic catchweighing and multi-dimensional measuring instrument designated the Bedal 3S and having the following characteristics:

Automatic Catchweigher:

Accuracy class: Y(a)

Scale interval, e: 50 g

Minimum capacity, Min: 250 g

Maximum capacity, Max: 30 kg

Multi-dimensional measuring instrument

	Width	Length	Height
Minimum dimension, Min	10 cm	10 cm	10 cm
Maximum dimension, Max	41 cm	75 cm	48 cm
Scale interval, d	0.5 cm	1 cm	1 cm

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: 23 January 2019

Valid until: 22 January 2029



Grégory Glas

Lead Technical Manager

For and on behalf of the Head of Technical Services



0135

Descriptive Annex

1 INTRODUCTION

The Parcel Kiosk Bedal 3S is a table-top automatic catchweigher and multi-dimensional measuring instrument designed to automatically capture the width, length, height and weight of cuboidal objects and transmit the measurement data to third-party systems.

2 DESCRIPTION

The Bedal 3S (Figure 1) is designed to be table-top mounted and comprises: a weighing platform utilising a single strain gauge load cell, 3 infrared sensors, 6 ultra-sonic sensors, a camera (for identification, not measurement purposes), and an indicator (Figure 2) to display measurement results.

The side arm mounted with infrared and ultrasonic sensors can be extended to accommodate larger objects (maximum length 75 cm).

2.1 Operation

When a cuboidal object is placed on the platform flush against the rear of the instrument the width, length, height and weight of that object are captured and a photograph taken of the top surface. The captured measurement data is shown on the display and is transmitted to a third-party system for processing.

Markings on the instrument direct the user to place the object flush against the centre-rear of the instrument.

2.2 Devices

The instrument has the following devices:

- Initial zero-setting device ($\leq 20\%$ Max)
- Semi-automatic zero-setting device ($\leq 4\%$ Max)
- Zero-tracking device ($\leq 4\%$ Max)
- Automatic zero-setting ($\leq 4\%$ Max)
- Stability of equilibrium interlock
- Bubble level indicator and 3 adjustable feet

3 TECHNICAL DATA

3.1 The Bedal 3S has the following technical characteristics:

Maximum capacity, Max	30 kg		
Minimum capacity, Min	250 g		
Verification scale interval, e	50 g		
Max number of scale intervals, n	640		
Accuracy class	Y(a)		
	Width	Length	Height
Minimum dimension, Min	10 cm	10 cm	10 cm
Maximum dimension, Max	41 cm	75 cm	48 cm
Verification scale interval, d	0.5 cm	1.0 cm	1.0 cm
Power supply	230 V A.C. 50 Hz		

Climatic environment	5 to 40 °C Closed, non-condensing
Electromagnetic environment	E2
Mechanical environment	M1

3.2 Load cell

The instrument houses one strain gauge load cell, $E_{max} = 30$ kg, type CBCD, manufactured by Curiotech Co., Ltd.

3.3 Documentation and drawings

The instrument is fully described in the technical file held at NMO.

3.4 Software

3.4.1 The software on the Bedal 3S meets the requirements of WELMEC Guide 7.2 (2018) Type P, Extension T.

The software on the instrument is split into three modules: the Main firmware handles the dimensioning functions (and calibration) and transmission of data to external devices. The Load cell firmware handles the weighing functions (and calibration) and communicates the measurements to the Main firmware. The Boot loader firmware handles the boot-up procedure and compares the checksums of all three software modules.

Checksums are calculated with a hidden polynomial over the Main firmware and Load cell firmware modules at boot-up and every 240 hours and compared with the stored checksum values, if the checksums do not match, the instrument shows an error code and becomes inoperable.

Recalibrations, parameter changes and firmware updates may be carried out via the USB port on the instrument using an external PC and proprietary software. Every time a dimensional calibration, weight calibration, or a firmware change is carried out; the non-editable event counters DCA, WCA or FWD will increment respectively.

3.4.2 Verification information

The firmware versions and checksums are displayed at every boot-up and are shown below for verification purposes:

Designation	Version number	Checksum
Main Firmware	G301-86-000-44_H	10DB
Load cell firmware	G301-86-400-10_G	17E5
Boot loader firmware	G301-86-200-10_D	2AC5

The event counters DCA, WCA and FWD described in section 3.4.1 can be displayed by holding *Mode* for 3 seconds, press *Down* so *EVC* is blinking, then press *Set*. The counters will be displayed as in Figure 3.

3.4.3 Data transmission

The instrument is capable of transmitting measurement data through an approved interface to an external device for legally relevant purposes. If the Bedal 3S is connected to an external device, the LED on the pillar will turn green and every completed measurement will

be automatically transmitted. If data is detected as corrupted then an error code will be shown to the operator, the LED on the pillar will turn red, and the dataset will be marked accordingly.

A transmitted measurement dataset comprises the following:

- MAC address of the Bedal 3S
- Date and timestamp
- Note of transmission success
- Length, unit of measurement
- Width, unit of measurement
- Height, unit of measurement
- Weight, unit of measurement

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

The instrument may have the following interface types:

- USB

4.2 Peripheral devices

The instrument may be connected to any peripheral device that has been issued with Parts Certificate by a Notified Body responsible for Module B under Directive 2014/32/EU and bears the CE marking of conformity to the relevant directives; or

A peripheral device without a Parts certificate may be connected under the following conditions:

- it bears the CE marking for conformity to the EMC Directive;
- it is not capable of transmitting any data or instruction into the measuring instrument, other than to release a printout, checking for correct data transmission or validation;
- it prints measurement results and other data as received from the measuring instrument without any modification or further processing; and
- it complies with the applicable requirements of Paragraph 8.1 of Annex I.

5 APPROVAL CONDITIONS

The certificate is issued subject to the following conditions:

5.1 Inscriptions

The instrument shall bear the following inscriptions (Figure 4):

- CE marking
- Supplementary metrology marking
- Manufacturer's name, registered trade name or registered trade mark and postal address
- Identification number of the notified body
- Information in respect of its accuracy

and, when applicable:

- Information in respect of the conditions of use
- Measuring capacity
- Identity marking (a type, batch or serial number or other element allowing their identification)
- Number of the EU-type examination certificate
- Information whether or not additional devices providing metrological results comply with the provisions of Directive 2014/32/EU on legal metrological control

The markings and inscriptions shall fulfil the requirements of Article 8, Article 21, Article 22 and Point 9 of Annex I of Directive 2014/32/EU.

5.2 The Bedal 3S is not suitable for measuring the following objects and inscriptions in the operator's manual inform the user accordingly:

- Irregular shaped objects
- Objects with protrusions
- Transparent / translucent objects

5.3 The Bedal 3S must be level before any measurements are taken. The instrument is supported by 3 adjustable feet, and a bubble level indicator is clearly visible to the operator.

6 LOCATION OF SEALS AND VERIFICATION MARKS

6.1 The data plate is located on the left-hand side of the instrument, and is secured, either by sealing or by being of a form such that it is destroyed when removed.

6.2 Access to the load cell and electronics is prevented by physical seals placed over securing screws below the weigh pan and over the side block which prevents the weigh pan from being removed (Figure 5). The sealings must bear an official mark, which may be either:

- a mark of the manufacturer and/or manufacturer's representative, or
- an official mark of a verification officer.

6.3 The value of the event counters described in section 3.4 must be written on a tamper-evident label near to the data plate. An example event counter label is shown in Figure 6.

6.4 Any ports for interfaces not listed in 4.1 are physically sealed to prevent their use.

7 ALTERNATIVES

There are currently no authorised alternatives.

8 ILLUSTRATIONS

Figure 1	Bedal 3S
Figure 2	Indicator
Figure 3	Event counters
Figure 4	Example data label

Figure 5 Sealing measures
Figure 6 Example event counter label

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
UK/0126/0247	23 January 2019	Type-examination certificate first issued.
-	-	No revisions have been issued.



Figure 1 Bedal 3S

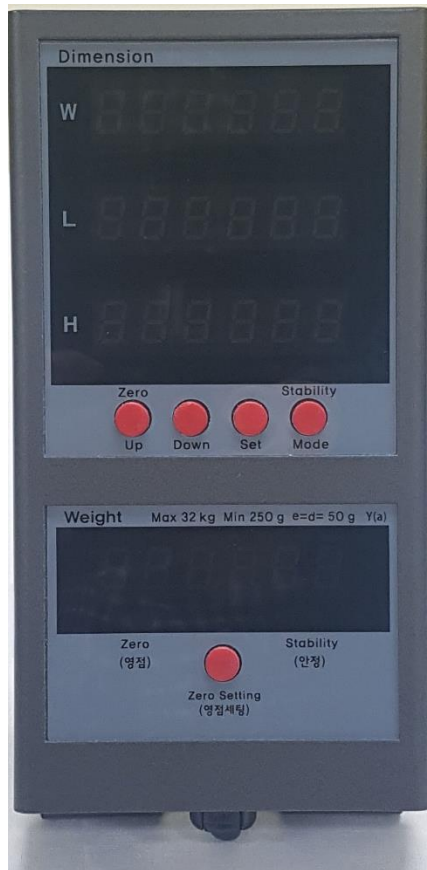


Figure 2 Indicator

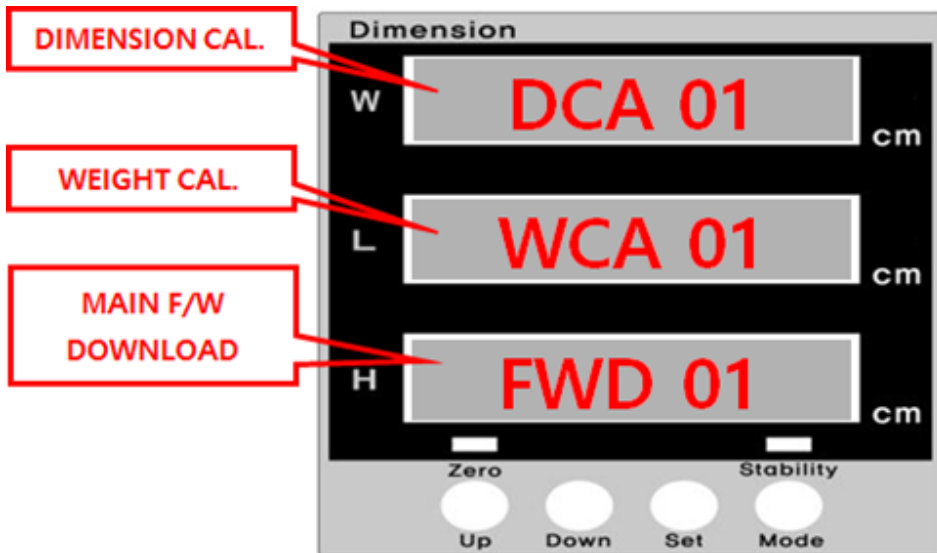


Figure 3 Event counters

parcekiosk A joint venture of **Welltec**



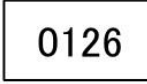
Manufacturer : PARCEL KIOSK LIMITED	DIMENSIONAL INSTRUMENT SPECIFICATION	
Model : Bedal 3S	Division : (W)0.5cmx(L)1.0cmx(H)1.0cm	
SN :	Capacity :	Minimum Maximum
Power : 230V AC, 50Hz	Width :	10.0cm 41.0cm
Operating Temp. : 5 °C ~ 40 °C (closed, non-condensing)	Length :	10.0cm 75.0cm
	Height :	10.0cm 48.0cm
WEIGHING INSTRUMENT SPECIFICATION		
Max : 30 kg	Min : 250 g	
e = d = 50 g	Y (a)	
Parcel Kiosk Limited Invision House, Wilbury Way, Hitchin SG4 0TY, UK		
		 
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Figure 4 Example data label

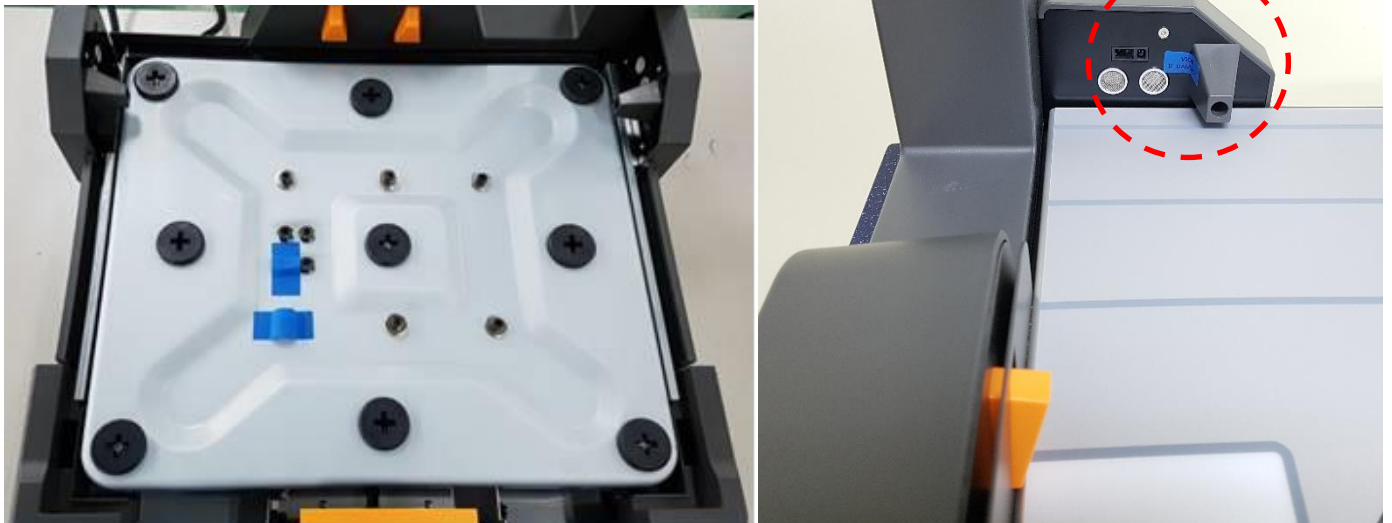



Figure 5 Sealing measures

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VOID IF TAMPERED

DESIGNATION	COUNT	DATE (dd/mm/yyyy)
DCA		
WCA		
FWD		

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Figure 6 Example event counter label