

National Measurement & Regulation Office



Member State of OIML United Kingdom of Great Britain and Northern Ireland OIML Certificate No R76/2006-GB1-12.09 Revision 3

OIML CERTIFICATE OF CONFORMITY

Issuing authority:

National Measurement and Regulation Office

Person responsible:

Applicant:

Paul Dixon – Director, Certification Services Digi Europe Ltd Digi House Rookwood Way Haverhill

Manufacturer:

The applicant

Suffolk, CB9 8DG United Kingdom

Identification of the certified pattern:

LI-700E

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 2006(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: Reference No: 03 August 2015 TS1201/0044

P R Dixon Certification Services Director



National Measurement and Regulation Office I Stanton Avenue I Teddington I TW11 OJZ I United Kingdom Tel +44 (0) 20 8943 7272 I Fax +44 (0) 20 8943 7270 I Web www.gov.uk/nmro The NMRO is an Executive Agency of the Department for Business Innovation and Skills The conformity was established by testing and examination described in the associated Evaluation Report P01338 which includes 38 pages.

Characteristics of the instrument:

This pattern of a non-automatic weighing instrument, designated the LI-700E, operates as a weight or weight/price labeller.

The instrument comprises a self-indicating and price-computing weighing machine with associated thermal label printer.

Construction:

- Stainless steel frame
- Scale conveyor, optional in-feed and out-feed conveyors (any number)
- Labeller
- Control cabinet located behind the conveyors, comprising:
 - Aplex Technology combined PC and LCD display type AHM-6127A or ARCHMI-812(P)
 - o Teraoka TPB-03484 A/D converter
 - TDK Lambda power supply unit type LS75 and UPS backup type Pico UPS-100

Devices:

- Initial zero-setting device ($\leq 4 \%$ of Max)
- Semi-automatic zero-setting device (\leq 4 % of Max)
- Zero-tracking device
- Preset tare device
- Semi-automatic tare weighing device (subtractive)
- Zero indication
- Calibration not accessible to user
- Price computation
- PLUs

Technical data:

Maximum capacity (Max)	3 kg	6 kg	10 kg
Scale interval (e =)	2 g		5 g
Minimum capacity (Min)	20 e		
Tare (T)	≤ - 50% Max		
Load cell E _{max}	15 kg		20 kg
Temperature range	0 to 40 °C		
Power supply	100-240 V a.c. / 50-60 Hz single phase		
Label applicator pneumatic	4-6 bar		
pressure			
Accuracy class	III		

Load cell:

The load cell is an HBM SP4M C3MR.

Software:

The software version number is 2.xx.xx.xxxx which is displayed during the power-up sequence of the instrument (DPS700.dll).

Alternatively, the instrument may use the World View software.

The legally relevant software is contained within two dll files, identified as follows in the "About" screen:

HeaderDisplay.dll	Version 1.0.0.10
DPS710.dll	Version 1.0.0.29

The instrument may be used for direct sales to the public when using the World View software.

Interfaces:

- Ethernet
- USB

Alternatives:

Max and e may differ from the values specified in the table on page 2 provided a compatibility of modules is established, based on the following technical data

Maximum number of scale intervals	6000
Load cell excitation voltage	3.3 Vdc
Minimum load cell impedance	43 Ω
Maximum load cell impedance	1100 Ω
Minimum input voltage per verification scale interval	0.88 μV
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	40 mV
Fraction of maximum permissible error	P _{ind} = 0.5
Load cell cable (from indicator to load cell junction box)	Maximum length = 1.5 m

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.

HC5600:

The instrument is identical in construction to the LI-700E, utilising the Tesco Counter application software. The application uses the weight information provided by the DPS700.dll software module described in page 3 to perform a checkweighing operation.

The metrological characteristics are as follows:

$$Max = 3000 g$$
$$Min = 40 g$$
$$e = 2 g$$

In the "Average Weigh (NAWI)" mode and "Speciality Weigh (NAWI)" mode, the instrument determines whether the load manually placed on the platform is within the preset minimum weight for the selected product and displays the result ("Acceptable" or ""Underweight Product). The operator is then prompted to accept the result before another item can be processed.

No label is generated if the load is not acceptable; if the load is not acceptable the instrument goes into "Reweigh" mode. In this mode all batch items are required to be processed (as opposed to batch sample only in Average Weigh (NAWI) and Speciality Weigh (NAWI) modes). The instrument determines whether the load manually placed on the platform is within the pre-set minimum weight for the selected product and displays the result ("Acceptable" or ""Underweight"). For rejected items a label is printed ("Waste not for sale" or similar).

The instrument logs the batch results in encrypted files and can also generate batch report.

Note: The Tesco Counter application includes other modes of operation ("Check Weigh (AWI)", "Label Only", "Average Weight (AWI)") which are not covered under this certificate (automatic weighing modes of operation). Each mode in operation is clearly identified on the user interface (bottom right corner).

The following legally relevant modules are identified by their respective designation and checksum values:

 DPS700.dll
 0D37

 Secure.Scale.Module/dll
 73954ba292858692bd28349bf20cda33e6a26a

The Tesco Counter application software is held as an executable file and as such cannot be modified by the user; its version number shall be 3.2.1.

This information can be displayed by selecting Menu > About from the operating menu. Selecting the "print checksums" button produces a printout with the software information.

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CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-12.09	08 August 2012	Certificate first issued
R76/2006-GB1-12.09	06 June 2014	DPS700.dll specified in Software section.
Rev 1		HC5600 section added.
R76/2006-GB1-12.09 Rev 2	16 February 2015	World View software added.
R76/2006-GB1-12.09 Rev 3	03 August 2015	Combined PC and LCD display type ARCHMI-812(P) added as an alternative in the Construction section.