National Measurement Office Certification

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

OIML Certificate No
R76/1992-GB1-07.13
Revision 3

OIML CERTIFICATE OF CONFORMITY

Issuing authority:	**National Measurement Office**
Person responsible:	**Paul Dixon – Director, Product Certification**
Applicant:	**Digi Europe Ltd** **Digi House** **Rookwood Way** **Haverhill** **Suffolk, CB9 8DG** **United Kingdom**
Manufacturer:	**The applicant**
Identification of the certified pattern:	**DPS-700 and CM-700**

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] or [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: **16 February 2015**
Reference No: **T1127/0031**

Signatory: **G Stones**
for **Chief Executive**

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UKAS PRODUCT CERTIFICATION 0135

National Measurement Office

The conformity was established by tests described in the associated pattern evaluation report P00690 Revision 1 which includes 24 pages.

Characteristics of the instrument:

This instrument utilises either the digital indicating device designated the DPS-700 indicator with optional labeller, or its compact version designated the CM-700, connected to a weighing platform to form a Class III or IIII, mains-powered, self-indicating non-automatic weighing instrument.

Main features:

- Processor and converter unit comprising a Teraoka TPB-2930 CPU and a Teraoka TPB-2786 A/D converter
- Touch screen (colour TFT-LCD module)
- Labeller type Digi DPS 700 thermal printer (optional)
- Metallic supporting frame (DPS-700 only)

Devices:

- Initial zero setting
- Semi-automatic zero setting
- Zero tracking
- Semi-automatic subtractive tare weighing
- Determination of stability of equilibrium
- Indication of stability of equilibrium
- Zero indicator
- PLUs
- Preset tare
- Price calculation

Load cell:

Any compatible load cell 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.

Technical data:

Power supply	100VAC-240VAC, 50 / 60 Hz	
Maximum number of scale intervals (single or multi-interval)	6,000	3,000
Load cell excitation voltage	10 Vdc	
Minimum load cell impedance	345 Ω	85 Ω
Maximum load cell impedance	440 Ω	3300 Ω
Minimum input voltage per verification scale interval	0.67 μV	1 μV
Measuring range minimum voltage	4.48 mV	
Measuring range maximum voltage	44.8 mV	
Fraction of maximum permissible error	P_{ind} = 0.5	
Operating temperature range	-10 °C to + 40 °C	
Load cell connection	4-wire shielded	6-wire shielded *
Load cell cable (junction box to indicator)	Maximum length = 3 m	No maximum length

* with additional EMC protection as described in GB-1283

Alternative hardware and associated technical data:

Drawing No.	**Description**
GA-DPS700SS-04	Dimensional drawing
BLK-00313-03	DPS-700 Block diagram
TPB-2930PNV Rev A0	TPB-2930PNV CPU diagram
TPB-03484-00-00 Rev 0	TPB-03484 A/D board diagram

Power supply	100VAC-240VAC, 50 / 60 Hz
Maximum number of scale intervals	6,000 (single or multi-interval)
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	0.67 μV
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	40 mV
Fraction of maximum permissible error	P_{ind} = 0.5
Operating temperature range	-10 °C to + 40 °C
Load cell connection	6-wire shielded
Load cell cable (junction box to indicator)	596 m/mm^2

Interfaces:

- Load cell 4 or 6-wire connection
- Ethernet
- USB
- Keyboard

Software:

The software version number is 2.xx.xx.xxxx (with x reflecting non-legally relevant changes) which is displayed during the power-up sequence of the instrument. The legal metrological code is contained within a dll file, DPS700.dll. The dll file is protected by a checksum which is also displayed during the power-up sequence. Any modification in the dll file will result in a change in the checksum value and an error being detected. Access to the Windows operating system is prevented by password protection.

Calibration and configuration modes are password protected, and can only be made operative (even if the password is entered) by operating the A/D switch located within the enclosure.

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.

Certificate History

ISSUE NO.	DATE	DESCRIPTION
R76/1992-GB1-07.13	19 December 2007	Certificate first issued.
R76/1992-GB1-07.13 rev 1	02 March 2009	3,000 div / 6-wire alternative added
R76/1992-GB1-07.13 rev 2	29 September 2011	6,000 div / 6-wire alternative added
R76/1992-GB1-07.13 rev 3	16 February 2015	Software section added.