

OIML Member State United Kingdom of Great Britain and Northern Ireland	OIML Certificate No. R76/2006-A-GB1-18.15
OIML CERTIFICATE ISSUED UNDER SCHEME A	
OIML Issuing Authority	NMO Stanton Avenue Teddington TW11 0JZ United Kingdom
Person responsible:	Mannie Panesar – Head of Technical Services
Applicant	Società Cooperativa Bilanciai Campogalliano Via S. Ferrari n.16 41011 Campogalliano (MO) Italy
Manufacturer	The applicant
Identification of the certified type	DD1010, DD1010IC, DD1010I, DD1010H, DD1010ICH, DD1010IH, DD1010 Flynet, DD1010IC Flynet, DD1010I Flynet, DD1010H Flynet, DD1010ICH Flynet, DD1010IH Flynet <i>(the detailed characteristics are defined in the Descriptive Annex)</i>
<p>This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):</p> <p>OIML R 76, Edition: 2006</p> <p>For accuracy class: III and IIII</p>	
<p>The OIML Issuing Authority</p> <p>Issue date: 15 October 2018</p>  <p>Grégory Glas Lead Technical Manager <i>For and on behalf of the Head of Technical Services</i></p>	

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated OIML type evaluation report:

No. P02486 dated 15 October 2018 that includes 18 pages

The technical documentation relating to the identified type is contained in documentation file:

No. P02486-D dated 15 October 2018

OIML Certificate History

Revision No.	Date	Description of the modification
0	15 October 2018	OIML Certificate first issued.
-	-	-

No revisions have been issued.

Important note:

Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

DESCRIPTIVE ANNEX

Characteristics of the instrument:

This family of instruments utilises the digital indicating devices designated the: DD1010, DD1010I DD1010IC DD1010H, DD1010IH and DD1010ICH connected to a weighing platform to form a Class III or IIII, AC mains or DC-powered, self-indicating, non-automatic weighing instrument.

The instruments shall not be used for direct sales to the public.

Main features:

DD1010

- ABS enclosure
- 5.7" graphic LCD display
- A/D conversion module 5 VDC (up to 2)
- Main board with processor

DD1010H

- ABS enclosure
- 5.7" graphic LCD display
- A/D conversion module 10 VDC (up to 2)
- Main board with processor

DD1010I

- Stainless steel enclosure with cable glands
- 5.7" graphic LCD display
- A/D conversion module 5 VDC (up to 2)
- Main board with processor
- Internal main power supply

DD1010IH

- Stainless steel enclosure with cable glands
- 5.7" graphic LCD display
- A/D conversion module 10 VDC (up to 2)
- Main board with processor
- Internal main power supply

DD1010IC

- Stainless steel enclosure with connectors
- 5.7" graphic LCD display
- A/D conversion module 5 VDC (up to 2)
- Main board with processor

DD1010ICH

- Stainless steel enclosure with connectors

- 5.7" graphic LCD display
- A/D conversion module 10 VDC (up to 2)
- Main board with processor

Devices:

- Initial zero setting
- Semi-automatic zero setting
- Zero tracking
- Automatic zero setting (negative load indications for more than 5 s)
- Semi-automatic subtractive tare weighing
- Determination of stability of equilibrium
- Indication of stability of equilibrium
- Zero indicator
- Preset tare
- MPP Alibi storage device
- Up to 2 load receptors
- Load receptors summation
- "Weighbridge modes":
 - AdR (or RDA): stores vehicle information except weights IN and OUT
 - RcD: unknown vehicles, stores weight IN until weight OUT captured, record then deleted
 - RpD (or RCP): stores vehicle information including weight IN
- Identification and recognition of the weighing board(s): the instrument records the A/D Converter unique identification number for each weighing channel, a new calibration is required if that number is not recognised at power up
- Identification and recognition of the digital load cells and junction box type DILINK: the instrument records the unique S/N of each digital load cell and/or the A/D Converter unique identification number of DILINK junction box for each weighing channel, a new calibration is required if these numbers are not recognised at power up
- Weight data transmission in open networks or wireless transmission in protected mode utilising protocols (encrypted transmission of weight data to a remote indicator). The load receptor and the indicator displaying the weighing result must be simultaneously visible to the operator (directly or indirectly) in this configuration.
- Optional connection to an external PC and subsequent printing of measurement data from the PC using the data from the MPP Alibi storage device on the indicator
- Optional connection to an external PC allowing printing of measurement data stored on an external PC using the data from the MPP Alibi storage device on the indicator
- Connection to digital load cells type CPD-M (UCM 00/002-F)
- Connection to smart junction box type DILINK (UCM 07/002-G)

Interfaces (≤ 30m):

- Load cell 6-wire shielded connection (analogue/digital)
- TTL 5V (in which case the instrument shall not be fitted with an analogue load cell connection)
- RS232/422/485
- Ethernet
- Wi-Fi communication on core module (internal antenna)
- 0-10 V / 0-20 mA analogue input/output
- Digital I/O
- Field bus (Profibus...)
- USB host

- SD Card
- Audio

Technical data:

Power supply	110 – 240 VAC, 50 / 60 Hz 12 VDC
Maximum number of scale intervals	6000 for single interval, Class III 4000 for multi-interval/range (2 partial ranges), Class III 3000 for multi-interval/range (3 partial ranges), Class III 1000 for single and multi-interval/range (2 and 3 partial ranges), Class III
Maximum tare	- Max
Maximum Preset Tare	- Max (single and multi-range) - Max ₁ (multi-interval)
Load cell excitation voltage Model DD1010, DD1010I, DD1010IC	4.5-5 VDC (10-18 VDC for digital load cells)
Load cell excitation voltage Model DD1010H, DD1010IH, DD1010ICH	9-10 VDC (10-18 VDC for digital load cells)
Minimum load cell impedance	29 Ω (per weighing module)
Maximum load cell impedance	1100 Ω
Minimum input voltage per scale interval Model DD1010, DD1010I, DD1010IC	0.5 μV
Minimum input voltage per scale interval Model DD1010H, DD1010IH, DD1010ICH	0.6 μV
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	27-30 mV
Fraction of maximum permissible error	P _{ind} = 0.5 (P _{ind} = 0 for digital load cells) (P _{ind} = 0 for analogues load cells with junction box DILINK)
Operating temperature range	-10°C / +40°C
Load cell connection (analogue load cells) Model DD1010H, DD1010IH, DD1010ICH	6-wire shielded Max length 3,358 m/mm ²
Load cell connection (analogue load cells) Model DD1010, DD1010I, DD1010IC	6-wire shielded Max length 15,162 m/mm ²

Load cell:

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.

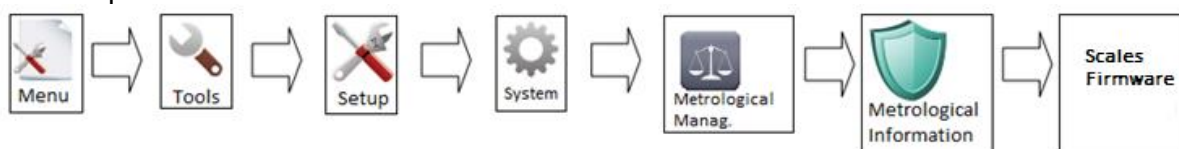
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation at the time of verification.
- The load cell transmission conforms to a standard type.

Digital load cells type CPD-M and junction box type DILINK may be connected to the indicator.

Software:

The software is split between the weighing board and the main board.

The software on the weighing board is embedded. The software identification can be displayed via the user interface: Menu > Info > Metrological Info > Scales Firmware, or alternatively with this path:



or alternatively with this path:

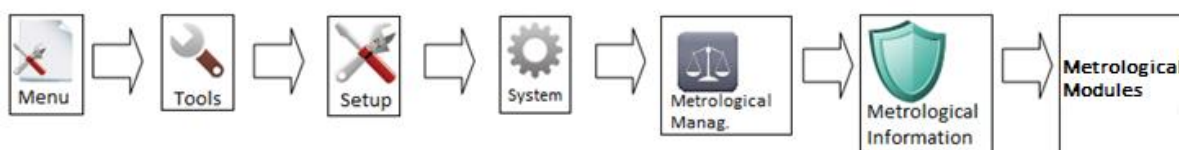


Hold the scale name button for 5 seconds > Metrological Information > Scales Firmware and shall be as follows (with x.x reflecting minor, non legally-relevant changes):

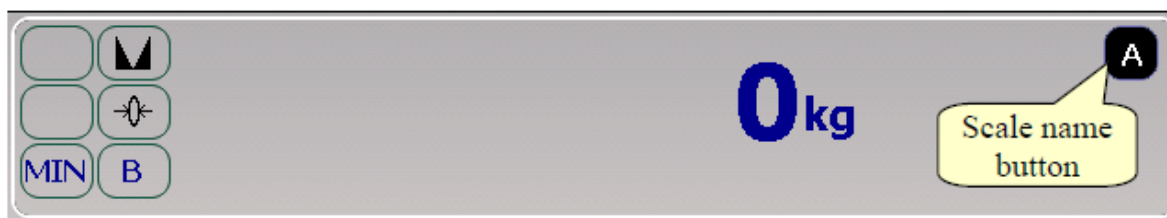
	Identification	Release	Checksum
Analogue version 5 VDC	491032	1.1.x.x	325E
		1.2.x.x	1FE8
		1.3.x.x	57FA
		1.4.x.x	0FBA
		1.5.x.x	6A5D
		1.6.x.x	5A3E
		2.0.x.x	63A8
Analogue version 10 VDC	491039	1.0.x.x	85E2
		1.1.x.x	CE47
		1.2.x.x	EF21
		1.3.x.x	FEE8
		1.4.x.x	E18A
		1.5.x.x	86A2
		1.6.x.x	B6C1
Digital version	491040	2.0.x.x	8F57
		1.0.x.x	B664
		1.1.x.x	7C08
		1.2.x.x	AE4E

		1.3.x.x	0201
		1.4.x.x	E8A2
		1.5.x.x	E69F
		1.6.x.x	D6FC
		2.0.x.x	EF6A
TTL Digital version	491059	1.0.x.x	5643
		1.1.x.x	4BC7
		1.2.x.x	7BA4
		2.0.x.x	02B6

The software on the main board is embedded or programmable (denoted with “*”). The software identification can be displayed via the user interface: Menu > Info > Metrological Info > Metrological modules, or alternatively with this path:



or alternatively with this path



Hold the scale name button for 5 seconds > Metrological Information > Metrological Modules and shall be as follows (with x.x reflecting minor, non legally-relevant changes):

	Release	Checksum
PluginBilancia.dll	3.1.x.x	EEC0414D99D9D4E74F236E407455B68A047937B5
	4.0.x.x	C0D2388F1D9C4C2C52026EB3F060B3A3076DA858
	4.1.x.x	2548BD87795BB40111CE508BF14D6055F061AB19
(*)	5.0.x.x	9009568EBA9265C128E004005EF638AE1E1E0912
PluginCBWeightViewer.dll	4.1.x.x	5B74C8C918B84ABC5BB713D867D45710A1B42591
	5.0.x.x	A5E7CCD1ADD6FDC8E302A7805A9734C5D50E3852
(*)	6.0.x.x	00094AB2D8EE8E558630857CC3781735517D320E
PluginCBMpp.dll	3.1.x.x	6FE313655513FACF1DB5C12174CDB24E2DC8C8C6
	4.0.x.x	3007FF9D56DA679E60D40997C13EBCF83D1D6347

The instruments are capable of long-term storage of measurement data either on internal memory, or on an SD card

Sealing:

Access to the electronics is prevented by physical sealing measures.

Components and devices that may not be dismantled or adjusted by the user must be secured. Common serial numbers, a wire and seal solution, software solution using identification and recognition of unique S/N, or a suitable sealing may be used.

Access to the SD card described under Software must be prevented via a tamper-evident seal.

Calibration and metrological configuration may be protected either:

- via a physically protected switch located on the instrument; or
- via a password whereby any changes increment a non-resettable counter. The counter is designated "SW seal counter" and can be displayed via the software menus. Changes are also logged on the instrument and can be viewed by the user.

Alternatives:

Having any of the instruments fitted with an alternative motherboard designated "Flynet". The instrument designation is suffixed with the word "Flynet" in this configuration i.e. DD1010 Flynet, DD1010IC Flynet, DD1010I Flynet, DD1010H Flynet, DD1010ICH Flynet, and DD1010IH Flynet.

The software and metrological characteristics remain unchanged.

The Flynet models may be fitted with the following protected interfaces ($\leq 30\text{m}$) in place of those listed under the Interface section above:

- Load cell 6-wire shielded connection (analogue/digital)
- RS232/422/485
- Ethernet
- Wi-Fi communication on core module (internal antenna)
- 0-10 V / 0-20 mA analogue input/output
- Digital I/O
- Field bus (Profibus...)
- USB host
- Audio
- HDMI