

OIML Member State United Kingdom of Great Britain and Northern Ireland	OIML Certificate No. R76/2006-A-GB1-18.12 Revision 1
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	DD1050, DD1050i, DD2050, DD2060X-Series <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>Issue date: 28 January 2019</p> <p>The OIML Issuing Authority</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. P02477 dated 28 January 2019 that includes 18 pages

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

No. P02477-D dated 28 January 2019

OIML Certificate History

Revision No.	Date	Description of the modification
0	28 August 2018	OIML Certificate first issued.
1	28 January 2019	Added alternative software parts. Added alternative "Legally Relevant Printout" parameter.

This revision replaces previous versions of the certificate.

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:

These indicating devices are designated the DD1050, DD1050i, DD2050 and DD2060X-Series. They are designed to be used as part of a Class III or IIII non-automatic weighing instrument. They operate as single interval, multi-interval or multi-range, are self-indicating and mains or DC-powered.

Main features:

DD1050

- Stainless steel and ABS enclosure
- 10.4" graphic LCD display
- A/D conversion module (up to 4)
- Main board with processor

DD1050i

- Stainless steel enclosure
- 10.4" graphic LCD display
- A/D conversion module (up to 4)
- Main board with processor
- Enclosed external power supply

DD2050

- Stainless steel enclosure
- 10.4" graphic LCD display
- A/D conversion module (up to 4)
- Main board with processor

DD2060X-Series

- Stainless steel enclosure
- 10.4" graphic LCD display
- A/D conversion module (up to 4)
- Main board with processor (CPU based on x86 Architecture and Windows 10 IOT)

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 4 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
- DD2050: 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, using the integrated printer on the DD2050
- Connection to digital load cells type CPD-M
- Connection to smart junction box type DILINK

Interfaces:

- 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
- USB
- 0-10 V / 0-20 mA analogue output
- Digital I/O
- 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 value	- Max
Maximum Preset Tare value	- Max (single and multi-range) - Max ₁ (multi-interval)
Load cell excitation voltage	9-10 VDC (10-18 VDC for digital load cells)
Minimum load cell impedance	29 Ω (for weighing module)

Maximum load cell impedance	1100 Ω
Minimum input voltage per verification scale interval	0.6 μ V
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	27-30 mV
Fraction of maximum permissible error	$P_i = 0.5$ ($P_i = 0$ for digital load cells) ($P_i = 0$ for analogues load cells with junction box DILINK)
Operating temperature range	- 10 $^{\circ}$ C to + 40 $^{\circ}$ C
Load cell cable (from indicator to load cell junction box) - Maximum length	6-wire shielded Max length 3358 m/mm ²

Load cell:

Any compatible load cell(s) may be used providing the following conditions are met:

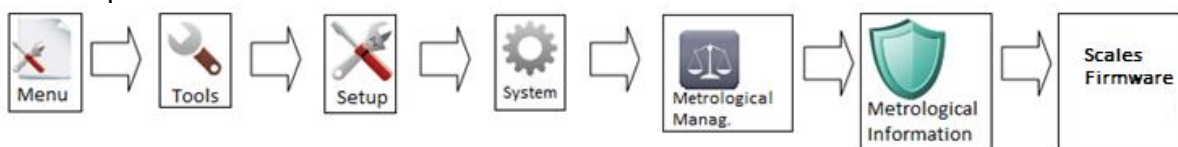
- There is a respective OIML Certificate of Conformity (R60) issued for the load cell.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules, and any particular installation requirements. A load cell marked 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.

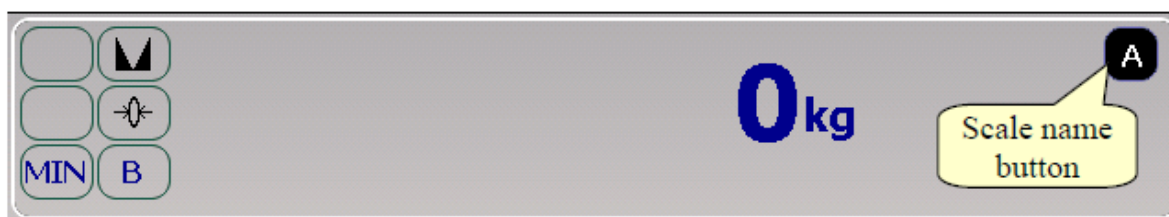
Software:

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:

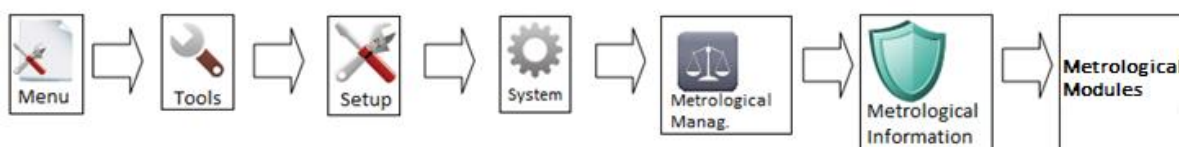


Hold the scale name button for 5 seconds > Metrological Information > Scales Firmware

and shall be as follows for verification:

	Identification	Release	Checksum
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
(*)		2.0.x.x	8F57
Analogue version 5 VDC	491032	1.6.x.x	5A3E
(*)		2.0.x.x	63A8
Digital version	491040	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	EF64
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 of the DD1050, DD1050i and DD2050 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 for verification:

	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 software on the main board of the DD2060X-Series is programmable. The software identification can be displayed via the user interface by pressing the 'scale name' button 5 times.



and shall be as follows for verification:

	Release	Checksum
Bilanciai.WeightIndicator.exe	1.0.x.x	D4234307
Bilanciai.ServiceLibrary.exe	1.0.x.x	C3930FF5

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.

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:

1. Having one or more of the software parts modified as follows:

Main board:

	Release	Checksum
Bilanciai.WeightIndicator.exe (*)	2.0.x.x	A31EB348
Bilanciai.ServiceLibrary.exe (*)	2.0.x.x	81FEF1FC
PluginBilancia.dll (*)	5.1.x.x	57BFF1EF4AF5B8DA9EEA794B94AE677476CCEE09A

PluginCBWeightViewer.dll (*)	7.0.x.x	01F91D37B5B6938F943930BDFCF2DB501388FDC1
PluginCBMpp.dll	4.1.x.x	F654A2B459BAEEE6F736D2CC36D992E8E31F282E

Embedded, or programmable (denoted with “*”).

2. For instruments running programmable software:

Having a configurable parameter, “Legally Relevant Printout”. When this parameter is enabled, the printouts produced by third party software are checked by the legally relevant software on the instrument, and either:

- The printouts are ensured to meet the requirements of OIML R76-1 (2006), or
- If the printouts do not meet the requirements of OIML R76-1 (2006), a note is present on the printout reading “Printout must not be used for legal purposes”, or similar.

The status of the “Legally Relevant Printout” parameter can be viewed by pressing the scale button 5 times then navigating to “Legally Relevant Printout”. The parameter is protected with either physical or software sealing. When the parameter is enabled, the printer cable connection must be sealed to the instrument.