

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

OIML Certificate No  
R76/2006-GB1-13.02

## OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement Office**

Person responsible: **Paul Dixon – Product Certification Manager**

Applicant: **Avery Weigh-Tronix  
Foundry Lane  
Smethwick  
West Midlands B66 2LP  
United Kingdom**

Manufacturer: **The applicant**

Identification of the certified pattern: **ZM201, ZM205 Series**

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] and [IIII]**

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.

**Issue Date:** 12 July 2013  
**Reference No:** TS0101/0020

  
**Signatory:** P R Dixon  
**for** Chief Executive

The conformity was established by tests described in the associated pattern evaluation report P01077 which includes 13 pages.

### **Characteristics of the instrument:**

#### Characteristics:

The family of indicating devices is designated the Avery Weigh-Tronix ZM201 / ZM205 Series. The indicators are self-indicating, mains, DC or battery-powered, and are designed to be used as part of a Class III or IIII, non-automatic weighing instrument.

#### Construction:

The indicator construction is dependent on the model number, the designation follows the following format: "Prefix-XYZ", with

- Model Number Prefix:  
ZM201 = Standard Indicator  
ZM205 = Baggage-weighing Indicator
- First Digit X – Enclosure material  
S = Stainless enclosure  
P = Plastic (ABS) Enclosure
- Second Digit Y – Mounting orientation  
D = Desktop  
P = Panel Mount  
R = Remote display
- Third Digit Z – Display Type  
0 = No display (signal processing unit)  
2 = TN – Green Background with Black Digits

The ZM201-XD2 desk mount variants feature 7 operational keys, whereas the ZM201-SP2 panel mount is fitted with 6 operational keys. The ZM205 is specifically designed for Baggage Weighing applications, and is fitted with 6 operational keys. The ZM201-SD0 and ZM205-SR2 have no keys.

#### Devices (ZM201):

- Semi-automatic zero setting ( $\leq 4\%$  Max)
- Zero tracking ( $\leq 4\%$  Max)
- Semi-automatic subtractive tare weighing
- Pre-set tare
- Recall of Gross indication when tare is active
- Determination of stability of equilibrium
- Indication of stability of equilibrium
- Checking of display
- Printing
- Gravity compensation
- Checkweighing
- Real time clock
- Counting
- Weigh labelling
- Command via external device (PC)
- Accumulation

- Target Weighing
- Batching
- Peak Hold
- Gross, Net, Tare, Preset tare, Print, Zero, Motion, Accumulation, Over/Under weight and Network indicators

Devices (ZM205):

- Semi-automatic zero setting ( $\leq 4\%$  Max)
- Zero tracking ( $\leq 4\%$  Max)
- Determination of stability of equilibrium
- Indication of stability of equilibrium
- Checking of display
- Printing
- Gravity compensation
- Real time clock
- Command via external device (PC)
- Accumulation (bag weights)
- Counting (number of bags)
- Clear (last bag weight or total weight)
- Bag weight limit
- Gross, Print, Zero, Motion, Total (bag weights), Over (number of bags over the weight limit), Bags (number of bags)

Technical data:

Power supply	ZM201-PD2/SP2/SD0, ZM205-SP2/SR2: 12-36V DC via mains adaptor ZM201-SD2: 110-240V AC(50/60Hz)
Maximum number of scale intervals	6000
Maximum Tare	-100% Max
Maximum Preset Tare	-100% Max
Load cell excitation voltage	5 VDC
Minimum load cell impedance	87.5 $\Omega$
Maximum load cell impedance	1100 $\Omega$
Minimum input voltage per scale interval	0.8 $\mu$ V
Measuring range minimum voltage	0.5 mV
Measuring range maximum voltage	25 mV
Fraction of maximum permissible error	$P_{ind} = 0.5$
Operating temperature range	-10 °C to +40 °C
Load cell connection	4 or 6-core with braided outer screen, flexible PVC overall Jacket. 0.5 mm <sup>2</sup> per core Maximum length (6-wire) = 30m (60 m/mm <sup>2</sup> )

Interfaces:

- Load cell 4-wire or 6-wire shielded connection
- 3 x logic level inputs
- 3 x open collector outputs
- 2 x RS232 serial ports
- 10/100 Ethernet

Optional PCBs (ZM201-SD2 and ZM201-PD2 only):

- Internal battery charging card and associated internal NiMH rechargeable battery pack

Optional Modules (ZM205-SP2 only):

- Relay card, providing one volt-free switched output
- Profibus card, providing one Profibus interface

Software:

The software is designated AWT30-500177 version 1.x.x.x (where x.x.x refers to the identification of non-legally relevant software, which may be modified by the manufacturer). The calibration and legally relevant parameters are protected via physical (jumper located on main board) or software means (password and incrementing counters).

**Certificate History**

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-13.02	12 July 2013	Certificate first issued
-	-	No revisions have been issued.