



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

OIML Certificate No
R76/2006-GB1-15.09

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement and Regulation Office**
Person responsible: **Paul Dixon – Director, Certification Services**
Applicant: **Charder Electronic Co Ltd**
103 Guozhong Road
Dah Li Dist.
Taichung City 412
Taiwan
Manufacturer: **The applicant**

Identification of the
certified pattern: **MS-xxxx 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]

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: **23 December 2015**
Reference No: **TS1201/0119**

P R Dixon
Technical Services Director



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The conformity was established by testing and examination described in the associated Evaluation Report P01480 which includes 14 pages.

Characteristics of the instrument:

This family of instruments is designated the MS-XXXX Series, and comprises the MS-4200 and MS-4201, MS-4202L and the MS-5900. The instruments are Class III Non-automatic Weighing Instruments for weighing persons.

Type	Model	Max, Min, e
Baby scale	MS-4200	Max =10/20 kg, Min = 100 g, e = 5/10 g (dual-interval) Max = 6/15 kg, Min = 40 g, e = 2/5 g (dual-interval) Max =20 kg, Min = 200 g, e = 10g
Baby & Teenager	MS-4201	Max = 20/50 kg, Min = 200 g, e = 10/20 g (dual-interval) Max = 60 kg, Min = 400 g, e = 20 g
Adult	MS-4202L	Max = 150/200 kg, Min = 1 kg, e = 50/100 g (dual-interval)
Baby scale	MS-5900	Max =6/15kg, Min = 40 g, e = 2/5g (dual-interval) Max =10/20kg, Min = 100 g, e = 5/10g (dual-interval) Max =15kg, Min = 100 g, e = 5g Max =20kg, Min = 200 g, e = 10g

Main features:

- LCD display fitted into load receptor: 5 digits, with Zero, Net and Hold indicators.
- MS4200
Three buttons: Tare, Hold, and On/Zero/Off buttons. (Figure 4)
- MS4201 & MS4202L
Four buttons: Tare, Hold/BMI, and two On/Zero/Off buttons. The orientation of the display depends on which On/Zero/Off button is pressed. (Figure 5)
- MS5900
Four buttons: Memory, Zero/Tare and On/Off buttons. (Figure 6)
- Aluminium base enclosure containing the load cell and electronics.
- Plastic load receptor with optional additional tray for baby weighing.
- Level indicator next to the display.
- Four adjustable feet for levelling.

Devices:

The instruments have the following devices:

- Initial zero setting device ($\leq 2\%$ of Max)
- Semi-automatic zero setting device ($\leq 4\%$ of Max)
- Zero tracking device ($\leq 4\%$ of Max)
- Zero indicator
- Net indicator
- Semi-automatic subtractive tare balancing device
- Net indicator.
- Hold facility.
- Hold indicator
- Gravity compensation

OIML Certificate No R76/2006-GB1-15.09

Technical data:

Model	MS-5900	MS-4200, MS-5900				MS-4201		MS-4202L
Max	15kg	6/15kg	10kg	20kg	10/20kg	20/50kg	60kg	150/200kg
Min	20 e or 20 e ₁							
e =	5g	2/5g	5g	10g	5/10g	10/20g	20g	50/100g
T≤	-9.995kg	-9.995kg	-9.995kg	-20.00kg	-9.995kg	-Max		-99.95 kg
Temp range	MS-5900:			0°C to 40°C				
	MS-4200, MS-4201 & MS-4202L:			5°C to 35°C				
Power supply	1) Battery: 1.5V x 6, or 2) 12V 1A via mains adaptor (any CE-mark adaptor may be used)							

Load cell

Instrument	Load cell type and capacity (E _{max})			
	True-Tec PA06	Tedea 1022	ZEMIC L6D	ZEMIC L6D8
MS-4200 (Baby Scale)	30kg or 35kg	30 kg or 35 kg	30 kg or 35 kg	N/A
MS-4201 (Baby & Teenager Scale)	N/A	75 kg	N/A	75 kg
MS-4202L (Adult Scale)	N/A	150 kg x 2	N/A	150 kg x 2
MS-5900 (Baby Scale)	30 kg or 35 kg	30 kg / 35 kg	30 kg or 35 kg	N/A

Interfaces:

The instruments may be fitted with the following protected interfaces:

- Bluetooth
- USB (MS-5900 Baby Scale)

Software:

The software version number is P-2.xx where xx relates to changes to the non-legally relevant software. This information is displayed at power up.

Software download using the communication ports (MS5900 only) is only possible via the USB interface, and is protected by switches on the sealed main board.

Sealing measures:

Access to the load cell, electronics and calibration download switches are secured via a tamper-evident solution bearing a securing mark. The securing mark may be either:

- a mark of the manufacturer and/or manufacturer's representative, or
- an official mark of a verification officer.

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-15.09	23 December 2015	Certificate first issued.
-	-	No revisions have been issued.