NMO

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

OIML Certificate No
R51/2006-GB1-14.03
Revision 1

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **NMO**

Person responsible: **Max Linnemann – Head of Certification Body**

Applicant: **RDS Technology Ltd**
Cirencester Road
Minchinhampton
Gloucestershire
GL6 9BH
United Kingdom

Manufacturer: **The applicant**

Identification of the certified pattern: **Loadmaster Alpha 100**

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 51 - Edition 2006(E) for accuracy class Y(b)

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: **22 September 2016**
Reference No: **TS0101/0028**

G Stones
Technical Manager
For and on behalf of the Head of Certification Body

UKAS PRODUCT CERTIFICATION
0135

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NMO is part of the Regulatory Delivery directorate within the Department for Business, Energy & Industrial Strategy

The conformity was established by testing and examinations described in the associated Evaluation Report P01289 which includes 12 pages.

Characteristics of the instrument:

Description:

This pattern of a battery-operated automatic catchweighing instrument, designated the Loadmaster Alpha 100, comprises a weighing module, "Terminator" junction box, Head unit" control and display module, pressure transducers and sensors mounted on a wheeled loader. This pattern automatically determines the load in the bucket during the lifting process, the hydraulic pressure in the loader's arms is converted by a pressure transducer, the output being used by the indicator to display the corresponding weight.

Components/modules:

- Pressure transducer(s)
- Boom Inclinometer
- Bucket sensor
- Boom sensor (Telescopic Loaders Only)
- Temperature sensor
- Chassis inclinometer
- Weighing module
- Junction box ("Terminator")
- Head unit control and display module (Isocan)

Technical data:

Maximum capacity (Max)	≤ 50,000 kg
Scale interval (e =)	≥ 10 kg
Minimum capacity (Min)	≥ 10 e
Maximum number of scale intervals	250
Pressure transducer	Danfoss type MBS 1250
Transducer measuring range	0…250 bar or 0…400 bar
Transducer output signal	4-20 mA
Minimum sensitivity	35 µV/div
Climatic environment	-25 °C to +50 °C Closed, non-condensing,: Head unit, printer Open, condensing: Weighing module, junction box, transducers, sensors
Electromagnetic environment	E3
Power supply	11-30 V DC (12 V and 24 V vehicle batteries)
Accuracy class	Y(b)

Interfaces:

- RS232
- Ethernet
- CAN 2

Devices:

- Start up display routine
- Semi-automatic zero setting (± 2% Max)
- Zero indicator
- Over/Under load interlocks
- Unsteady load interlock
- Preset tare (optional)
- Long-term storage device
- Printing (optional)

Software:

The legally relevant software identification shall be as follows:

Software type	Designation	Version number
Weighing module	LX100	003
Isocan	IS100	005
Database	DBIS100	001

The software identification can be displayed in the USER menu in “About System”.

All other software modules are non-legally relevant and may be freely modified.

Sealing measures:

Weighing module and rating plate sealed by a tamper-evident sticker.
Transducers sealed via serial numbers written on a tamper-evident label, itself sealed by tamper-evident sticker.
Legally relevant software and parameters sealed via software means (“Calibration counter”).

Alternatives:

Having the instrument fitted to a single acting hydraulic ram i.e. fork lift truck, or other single acting loader, provided no back pressure can occur. The second pressure sensor is not connected.

Having the instrument fitted to a Telescopic loader with a boom extension sensor.

Having the instrument set-up with up to 10 different attachments (bucket, grabs, tines, etc). The attachment identification is displayed at the top of the display. Each attachment is calibrated independently, with the calibration factors recalled when the attachment is selected.

Having the instrument operating with “kick out” relay automatically stopping the loading arm at the reference point during the lifting cycle.

Having the instrument fitted with up to 4 pressure sensors.

Having alternative legally relevant software identification as follows:

Software type	Designation	Version number
Weighing module	LX100	004
Isocan	IS100	006
Database	DBIS100	001

Having the instrument fitted with a Reference and Direction sensor to trigger the weighing process in place of the boom inclinometer. The weighing process is activated at a certain linear position instead of angular position.

Having the instrument fitted with a Gyro sensor to trigger the weighing process in place of the boom inclinometer.

Having the instrument fitted with a Gyro sensor in place of the bucket sensor. The Gryo sensor carries out the same function as the bucket sensor by preventing weighing outside of angular limits.

Having the instrument fitted with an inclinometer in place of the bucket sensor. The inclinometer carries out the same function as the bucket sensor by preventing weighing outside of angular limits.

CERTIFICATE HISTORY

ISSUE NO.	DATE	DESCRIPTION
R51/2006-GB1-14.03	19 September 2014	OIML certificate first issued.
R51/2006-GB1-14.03 Rev 1	22 September 2016	Corrected Database DBIS version number from 003 under Software. Added 5 alternatives, Alternative legally relevant software, Reference and Direction sensor or Gyro sensor in place of Inclinometer, Gyro sensor or inclinometer in place of Bucket sensor.