



OIML Member State United Kingdom of Great Britain and Northern Ireland OIML Certificate No. R76/2006-A-GB1-19.11

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	Adam Equipment Maidstone Road, Kingston, Milton Keynes, MK10 0BD United Kingdom		
Manufacturer	The applicant		
Identification of the certified type	AE 403M, GK-Mplus (the detailed characteristics are defined in the Descriptive Annex)		
This OIML Certificate at sample(s) identified in the Recommendation of the	tests the conformity of the above identified type (represented by the he OIML type evaluation report) with the requirements of the following International Organization of Legal Metrology (OIML):		

OIML R 76, Edition: 2006

For accuracy class: III

Issue date: 07 August 2019

The OIML Issuing Authority

M. Bohster.

Marek Bokota Technical Manager For and on behalf of the Head of Technical Services

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Tel +44 (0) 20 8943 7272 I Fax +44 (0) 20 8943 7270 I Web www.gov.uk/government/organisations/office-for-product-safety-and-standards NMO is part of the Office for Product Safety and Standards within the Department for Business, Energy & Industrial Strategy 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. P02502 dated 7 August 2019 that includes 18 pages

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

No. P02502-D dated 7 August 2019

OIML Certificate History

Revision No.	Date	Description of the modification
0	7 August 2019	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

Introduction:

The family of instruments, designated the AE 403M series and GK-Mplus series, comprise a digital weight indicator connected to one or more load cells to form single interval, Class III or IIII, non-automatic weighing instruments. The instruments are self-indicating and mainspowered with an optional, internal rechargeable battery for back-up power.

Model variants and designation:

The AE 403M series and GK-Mplus series of instruments utilise an AE 403M indicator or GK-Mplus indicator respectively. The family comprises the following models:

AE 403M series:	GK-Mplus series:
AGB XXM	GBK XXMplus
AGF XXM	GFK XXMplus
GGS XXM	
GGB XXM	
GGF XXM	
GGL XXM	

Where "XX" may be a numerical value 0-9 designating the model's maximum capacity (Max).

Main features:

AE 403M:

- Stainless steel enclosure, IP-67 rated
- Integral monochrome LCD display
- 6 push-button, navigation and function keys

GK-Mplus:

- ABS plastic enclosure
- Integral monochrome LCD display
- 20 push-button, numerical, navigation and function keys

Devices:

- Initial zero setting device on power up
- Semi-automatic zero setting
- Zero tracking (optional)
- Semi-automatic subtractive tare balancing
- Zero-indicator
- Indication of stable equilibrium
- Net indicator
- Printing (when connected to simple recipient printer)
- Gravity compensation
- Short term memory storage
- Accumulation
- Check-weighing
- Parts counting / Percent weighing
- Animal (dynamic) weighing

Technical data:

Power supply	230 VAC, 50 Hz, or Internal rechargeable 6 VDC battery
Operating temperature range	- 10 °C to + 40 °C
Load cell excitation voltage	5 VDC
Maximum Tare value	- Max
Fraction of maximum permissible error	P _i = 0.5
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	16 mV
Maximum number of scale intervals	6,000
Minimum load cell impedance	350 Ω
Maximum load cell impedance	1100 Ω
Minimum input voltage per verification scale interval	1.0 μV
Load cell cable (from indicator to load cell junction box) - Maximum length	4 m (4 or 6-wire)

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) 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.

Interfaces:

- Load cell connection
- RS232/485
- Relay (AE 403M only)

Software:

The software is held in firmware on the circuit board, and has the identification as described below:

Instrument	Software identification
AE 403M	v1.xx
GK-Mplus	v1.xx

with xx reflecting non-legally relevant changes. The software version number is displayed at power-up.

The program is fully embedded on the integrated PCB and downloads are only possible by gaining access to the ICE port within the enclosure. A jumper must be fitted on the PCB to gain access to legally relevant parameters.

Sealing:

The enclosure is secured by either a tamper evident sticker over a securing screw or by a lead and wire type seal through securing screws.

The load cell connection must be secured by either a tamper evident sticker or by a lead and wire type seal.

Alternatives:

There are currently no authorised alternatives.