



# **CALIBRATION CERTIFICATE**

2005-06547

#### Customer information

Client

: Cleanroom Control And Sterilization Technology

Contact

: Mevr. Angelika Zweimüller

Address

: Triesterstrasse 36

2512 Oeynhausen

Germany

Reference client

: CP0999790152

Reference Trescal

: 202019660/1

Instrument information

Make / type

: AMPTEK INC / MCA8000D

Description

: Recorder/datalogger

Range

Serial number

: 00738

Identification number

: C83

Accuracy

: 15 May 2020

# Date of calibration Method of calibration

P1-02-E.001 Calibration of electrical measurement instruments

Electrical instruments are calibrated with a multifunctional calibrator and/or a digital multimeter.

### Environmental conditions (used in determination of uncertainty)

Ambient temperature

: 23 °C ± 1 °C

Relative humidity

: 40%rh - 55%rh

## Used reference

The measurements have been executed using standards for which the traceability to (inter)national standards has been demonstrated towards the Dutch Accreditation Council (RvA).

150654/2

High performance Calibrator Cert.181116156

#### Note

The instrument is measured but not adjusted, so the results are both 'as found' as 'as left'.

Issue date: 15 May 2020

Technician Eelco Ooms Head of the laboratory Luc Van Pelt

RvA is member of the European Co-operation for Accreditation (EA) and is one of the signatories of the EA Multilateral Agreement and to the ILAC (International Laboratory Accreditation Co-operation) Mutual Recognition Arrangements (MRA) for the mutual recognition of calibration certificates.

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Conclusion:

The results comply with the manufacturer specifications.

Calibration Method: After acclimatising for a period not less than 1 hour; he measurement

functions of the MCA800D are verified using a calibrator.

The instrument is not adjusted.

The measured values are the result of 1 observations.

The error is defined as value of the UUT (reading/setting) - value of the

Standard(supplied/measured).

Gain accuracy at 1 kHz

UUT	Supplied	UUT	Limit	Limit	Error ±
Range		Reading	Min	Max	Uncertainty
1 V	800,0 mV	0,80290 V	0,79508 V	0,80499 V	$(2.9 \pm 0.4) \text{mV}$
10 V	8,000 V	8,0011 V	7,9508 V	8,0499 V	$(1 \pm 4) \text{mV}$

The stated uncertainty is that of the entire set-up including the object under test.

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

The uncertainty is calculated following EA-4/02 in accordance with the requirements of the ISO/IEC 17025.