

## Calibration of gas analyzers

manually, remotely or automatically controlled

# Air Pollution Multigas Calibrator APMC-370

HORIBA Europe's APMC-370 is designed to calibrate gas analyzers manually, remotely controlled or automatically, installed in air pollution monitoring stations, for quality assurance in the laboratory and also for the production of gas analyzers.

Dilution of gases with high accuracy and precision requires high quality mfc's, especially for high dilution ratios and ranges. Consequently HORIBA's APMC-370 is equipped with digital mfc's. These mfc's are factory calibrated, optional also with a special Polynomial Calibration.



CE marking compliant



## Functions:

A special feature of HORIBA's APMC-370 is the big size touch screen panel, for ease of operation. Characteristic of the operation of HORIBA's APMC-370 is the intuitive, simple and user friendly menu. (Flow rate, mg/m<sup>3</sup>, ppb/ppm, automatic cycles etc.) Via the touch screen it is e.g. possible to enter span gas concentrations or to start automatic routines like multi point calibration cycles.

Routine sequences like calculating and adjusting span gas concentrations as well as complex flow patterns for multi point calibration cycles can be stored and easily activated. All functions are controlled by an internal CPU with a state-of-the-art 32-bit operating system. This internal microprocessor continuously calculates and displays the final gas concentrations in the selected units (ppb/ppm or mg/m<sup>3</sup>-µg/m<sup>3</sup>). Adjustment, monitoring and regulation of flow rates are done fully automatically. These cycles are programmed in the unit's memory, thus time spent setting up calibrations on-site is minimized.

All critical operational parameters are monitored; any failure message will be displayed and transmitted via the interfaces. Integrated data logger: During multi point calibration cycles, the span gas concentrations switch automatically with the integrated data logger stores storing continuously the data of the connected gas analysers. Afterwards data can be transferred to a standard browser via Ethernet connection for further evaluation.

HORIBA Europe's APMC-370 is a modular system and can be adapted and upgraded any time to accommodate most of customer's requests.

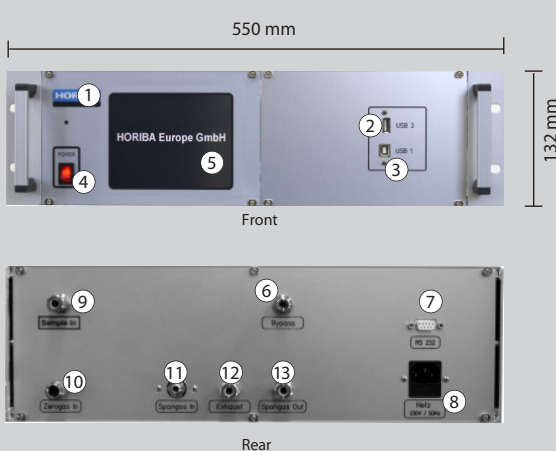
## Features:

- Fulfills the requirements of the latest EN-Norms specially in respect to the linearity check.
- Exceeds the US EPA requirements.
- Measurement methods according to international standards.
- Microprocessor controlled with touch screen LCD display.
- Precision of span gas concentration : better than 1%.
- Linearity of span gas concentration : better than 1%.
- Multipoint Calibration : 8 individually adjustable cycles, each with upto 20 calibration points.
- Each calibration cycle runs also automatically.
- Both 19" rack mounted version or Portable version
- Options:
  - a) Additional mass flow controllers ( max. 8 )
  - b) Ozone oven for the calibration of O<sub>3</sub> analyzers and / or gas phase titration (GPT)
  - c) Internal zero gas calibration system
  - d) permeation oven

## Specifications

Model	APMC-370
Application	Air Pollution Multigas Calibrator
Flow range	Zero gas 0,2 – 4,00 l/min Purge gas 2,5 – 50 ml/min
Display	TFT 640 x 480 Pixels with Touch
Gas inlet	1 x Span gas NO
Gas outlet	1 x Span gas NO, 1 x Bypass
Input pressure	1 bar
Span gas steps	20 + zero gas
Auto cal cycles	10 with 20 steps
Step time auto cal	1 – 1440 minutes ( 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 20, 30, 45, 60, 90, 120, 150, 180, 240, 360, 420, 480, 540, 600, 720, 840, 960, 1080, 1200, 1320, 1440 )
Display	TFT 640 x 480 Pixels with Touch
Power supply	100 - 240V / 50 Hz, max. 75 VA
Dimensions ( L x H x D )	480 x 550 x 132 mm
Weight	11 kg

## External dimensions



Names of parts	Notes
① Front panel	
② USB 2 connector	For update or configuration copy
③ USB 1 connector	For factory only
④ Power ON / OFF	
⑤ Display	
⑥ Bypass out	
⑦ RS 232	Gesyttec protocol
⑧ Power IN	100 - 240 V / 50 Hz
⑨ Sample IN	
⑩ Zero gas IN	
⑪ Span gas IN	
⑫ Exhaust	
⑬ Span gas out	



Please read the manual before using this product to assure safe and proper handling of the product.

- The contents of this data sheet are subject to change without prior notice, and without any subsequent liability to this company.
- It is strictly forbidden to copy the content of this data sheet in part or in full.

### Contact Address

**HORIBA Europe GmbH**

Office Leichlingen

Julius-Kronenberg-Strasse 9, 42799 Leichlingen ( Germany )

Phone : +49 (0) 2175 8978-0 Fax : +49 (0) 2175 8978-50

<http://www.horiba.com>