



Optionally preparation of calibration gas by:

- Gas Mixing
- Saturation Method
- Continuous Injection
- Ozone Generator
- Gas Phase Titration
- Permeation Method

The calibrating systems of the MK-Eseries allow us to provide a customer built unit, which consists of a variety of tried and tested basic modules.

This unit will be tailored specifically to your application.

The systems find their field of operation in the calibration of immission and emission measuring devices and gas chromatographs of the environmental measuring technology and process analyzing industry.

The calibration systems of the EasyCal series can be equipped with different span gas modules. Other modules such as remote controls for automatic measuring networks, integrated span gas dredging pumps for pressure-free span gas pre-mixtures, extra modules for humidification of the span gas, or operation mode switchers for 'sample / zero /span' complete the diverse accessory palette and make it possible to fit the system to your specific needs.

The settings of the gas flows, temperatures or intensities will be done by means of the color touch panel display. Up to 10 recipes can be stored and with one click you can start generation of the desired gas mixture.



EasyCal compact enclosure for up to 3 gases

Dimension: 22x20x12cm

The Basis

The basis of the modular calibration system in the case of the EasyCal 5/10 series is a 19" enclosure with 4 HU (unit of height) and in the case of the 10 series a 19" enclosure with 7 HE. The enclosure can be delivered either as a table or rack unit. Also included in this basic system are the connections necessary to install the various modules, the dilution MFC and the power supply. A compact EasyCal gas diluter for up to three gases is available in a housing with dimension of only 22x20x12cm.

The Modules

The calibrating systems of the EasyCal series do not consist of a limited number of functionally restricted devices, but of three (differing in size) basic systems, which can be equipped with different calibration modules according to your choice. Your advantage is clearly obvious: Compilation of the modules according to the required function volume, optimal adaptation of the device to your calibration tasks, no new construction or tinkering around when finding a solution for your personal application case but instead a modular system made up from tested and proven successful basic components.

Your Advantage

Gas Mix System

Used to dilute and mix external span gas pre-mixtures to the desired concentration. The adjusting of the span and dilution gas flows is effected via thermal mass flow controllers.

Ozone Generator

Used for the production of ozone span gas from zero gas. The UV chamber used for this purpose achieves an above average level of UV ray stability due to the special regulatory and control unit.

Gas Phase Titration

This module allows for an externally supplied span gas pre-mixture (e.g., NO) to be oxidized in an adjustable ratio with the supply of the internally produced ozone gas (result NO + NO₂).

Permeation

The temperature variable permeation furnaces can be equipped with all standard permeation tubes. Special components and switch technologies allow for a climatizing of the permeation furnaces ranging from below the environmental temperature (with option cooling) up to more than 100°C with a stability of ±0.1°C.

Vapor Pressure Saturation

Used for the continuous production of a span gas with the vaporizing of a liquid component from a storage container in the calibration system. The concentration adjustment is effected with a diluting gas flow.

Continuous Injection

In the case of the injection method, a liquid component is injected into a base gas flow from an automatic, external injection device via a vaporizer. The base gas flow can be adjusted using a mass flow controller.

Further information, data sheets, and application documents for the EasyCal5/10 calibrating systems can be obtained from your representative or directly by contacting MCZ GmbH.