

# HMK15 Humidity Calibrator



## Features

- Easy and reliable calibration of humidity probes and transmitters
- Based on saturated salt solutions
- Fast temperature equilibration
- No external power required
- Suitable for laboratory use and on-site checks
- Chambers and transit covers make HMK15 easy to transport
- Pre-measured certified salts available
- Vaisala Service Centers offer accredited calibrations for humidity, temperature, and barometric pressure

No measuring instrument stays accurate by itself. It is essential that the functioning of an instrument is periodically checked against a reference. Vaisala has developed Vaisala Humidity Calibrator HMK15 to make calibration and spot checking of humidity probes and transmitters easy and reliable.

## Benefits

- Easy to use
- Reliable calibration
- Certified and pre-measured salts available on order form of HMK15

## Method used by leading laboratories

The operating principle of HMK15 is based on the fact that a saturated salt solution generates a certain relative humidity in the air above it. The reading of the humidity probe or transmitter can

then be adjusted accordingly. Many leading laboratories use this generally accepted and reliable method to calibrate humidity instruments. Usually two or three different salt solutions are used. Salts are chosen according to the application.

## Certified salts

HMK15 can be ordered with certified and pre-measured salts. A sample calibration is made from each batch in Vaisala's Measurement Standards Laboratory (MSL).

## FINAS accredited measurement standards laboratory

Vaisala's Measurement Standards Laboratory is a FINAS accredited calibration laboratory. FINAS is a member of the EA (the European Cooperation for Accreditation).



# Technical data

## Operating environment

Operating temperature range +0 ... +50 °C (+32 ... +122 °F)

## Mechanical specifications

Dimensions (H × W × L) 90 × 230 × 200 mm  
(3.54 × 9.06 × 7.87 in)

Weight 1 kg (2.20 lb) without salt solutions

Material Anodized aluminum

## Parts

### Standard contents of HMK15 Calibrator

Base plate

Two salt chambers, chamber covers, and transit covers

Thermometer

Measurement cup and mixing spoon

### Optional items

See table *Spare parts and accessories*.

## Spare parts and accessories

Rubber plug set 19746HM

Salt chamber 19766HM

Ion exchanged water 19767HM

Adapter fitting for 12 mm probes 211302SP

Thermometer with red capillary liquid 25130HM

Transit bag HM27032

Cover set for DMT132/HMP110 with filter 230914

HMK15 chamber lid for 4 × HMP110 with filter 253277SP

Adapter for HMP42 probe HM37067

### Certified and ready dosed salts <sup>1)</sup>

Ready-dosed LiCl salt package (LiCl salt 11 %RH, total uncertainty ±1.3 %RH) <sup>2)</sup> 19729HM

Ready-dosed MgCl<sub>2</sub> salt package (MgCl<sub>2</sub> salt 33 %RH, total uncertainty ±1.2 %RH) <sup>2)</sup> 19730HM

Ready-dosed NaCl salt package (NaCl salt 75 %RH, total uncertainty ±1.5 %RH) <sup>2)</sup> 19731HM

Ready-dosed KCl salt package (KCl salt 85 %RH, total uncertainty ±2.0 %RH) <sup>2)</sup> 251377HM

Ready-dosed K<sub>2</sub>SO<sub>4</sub> salt package (K<sub>2</sub>SO<sub>4</sub> salt 97 %RH, total uncertainty ±2.0 %RH) <sup>2)</sup> 19732HM

<sup>1)</sup> Calibration certificate included with each salt package.

<sup>2)</sup> Uncertainties given at +20 °C (+68 °C).

