The handheld Vaisala Measurement Indicator MI70

The MI70 connected to a GM70 diffusion sampling probe measures CO_2 concentration. It is a handy tool for spot-checking measurement.

Features/Benefits:

- Wide selection of measurement probes
  – the HM70,
  – DM70,
  – MM70 and
  – GM70 series
- Multiprobe operation - combine any two probes
- May be connected to certain Vaisala's fixed transmitters
- User-friendly interface
- Multiple language options
- Suitable for field checking of fixed instruments

Up to three measurement parameters can be selected by the user, and displayed at the same time. The graphic display shows the stabilization of measurement and process trends.

The Vaisala Measurement Indicator MI70 is a user-friendly indicator, and when combined with a measurement probe it is ideal for field checking and calibration of Vaisala's fixed instruments. The MI70 has probes for measuring humidity and temperature, dewpoint, moisture in oil and CO_2. In addition, the MI70 can be used as a display when connected to certain Vaisala transmitters.

One or 2 probes at a time

The MI70 indicator has two cable ports, by which a combination of any two probes (or transmitters) can be connected to it, at a time. For example, a humidity and temperature probe could be connected to the one port, and a CO_2 probe to the other. The indicator can display the measurements made by both probes, so humidity, temperature and CO_2 data could be displayed simultaneously.
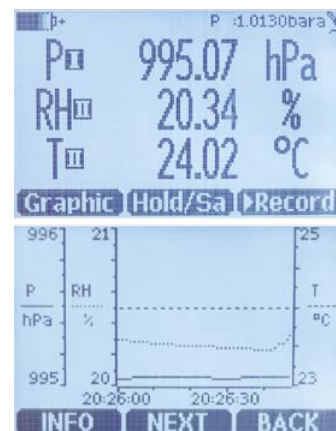
Easy-to-use user-interface

The MI70 features a multilingual, menu-based user interface, and a clear graphical LCD display. All-in-all three measurement parameters can be displayed, and simultaneously logged in the memory. The display shows measurement trends graphically and numerically. The measurement parameters and units can be selected by the user. The MI70's user-friendly user interface operates with menus and keypads to change settings, logging and display preferences.

Multiple language options

The MI70 is programmed with a variety of languages: English, German, French, Finnish, Spanish, Swedish, Chinese, Russian and Japanese.

Optional connection to PC

The optional MI70 Link Windows® software and the USB connection cable form a practical tool for transferring logged data as well as real time measurement data from the MI70 to a PC.

Technical data

MI70 measurement indicator, general

Menu languages	English, Chinese, French, Spanish, German, Russian, Japanese, Swedish, Finnish
Display	LCD with backlight, graphic trend display of any parameter, character height up to 16 mm
Max. no. of probes	2
Power supply	Rechargeable NiMH battery pack with AC-adapter or 4xAA-size alkalines, type IEC LR6
Resolution	0.01 %RH, 0.01 °C/°F, 0.01 hPa, 0.01 aw, 0.01 ppm/% CO_2
Analog output (w/ accessory cable)	0 ... 1 VDC
Output resolution	0.6 mV
PC interface	MI70 Link software with USB or serial port cable
Data logging capacity	2700 points
Logging interval	1 s ... 12 h
Logging duration	1 min ... memory full
Alarm	audible alarm function
Operating temperature range	-10 ... +40 °C (+40 ... +104 °F)
Operating humidity range	non-condensing
Housing classification	IP54
Housing materials	ABS/PC blend
Weight (indicator only)	400 g
Battery operation time (depends on chosen probe/probes)	
Continuous use (one probe of HM70, DM70 and MM70 series)	48 h typical at +20 °C (+68 °F)
Continuous use (GM70 handle)	better than 8 h at +20 °C (+68 °F)
Continuous use (GM70 pump)	better than 5 h at +20 °C (+68 °F)
Data logging use	up to a month, depending on logging interval
Environmental settings e.g. pressure (and temperature, if not incl.)	user definable

Electromagnetic compatibility

EN 61326-1, Portable Equipment

Measurement probes for the MI70

HM70 Series Humidity and Temperature probes

HMP75(B)	General purpose probe
HMP76(B)	Long, stainless steel probe
HMP77(B)	Small probe, with 5 m cable

DM70 Series dewpoint probes

DMP74A, DMP74B	Pressure tight probes for dry air measurements
DMP74C	Probe for SF_6 gas measurements

MM70 Moisture in oil probe

MMP78	Pressure tight, stainless steel probe

GM70 Carbon Dioxide probes

GMH70	Handle for probe for diffusion sampling
GM70PUMP	Pump for probe for pump aspirated sampling

For full specifications of the measurement probes see relevant brochures/User's Guides (use the relevant order form to define ordered probe)

Accessories

Carrying cases	
for MI70 and HMP75/77, one DM70, or GM70 probe (of black ABS)	MI70CASE
for MI70 and HMP75/76, two DM70 probes, or MM70 probe (of aluminium)	MI70CASE2
Transmitter connection cables for	
MMT/HMT330, HMT100, DMT340, PTB330, PTU300 Series	211339
HMD/W 60/70 Series	HMA6070
DMT242	27160ZZ
DMT142	211917ZZ
DMT152, MMT162	219980
MMT/HMT310 Series, GMP343	DRW216050
GMT220, GMM220, GMW/D20	GMA70
HMP155	221801
MI70 Link software with USB cable	219687
MI70 Link software with serial port cable	MI70LINK
Analog output cable	27168ZZ
10 m (32.81 ft) extension cable for probe	213107SP
Battery, NiMH 4.8 V	26755

CE