



# MI70 Handheld Measurement Indicator



## Features

- Wide selection of measurement probes – HM70, DM70, MM70, GM70
- Multi-probe operation - combine any two probes
- Can be connected to selected Vaisala's fixed transmitters
- Intuitive interface
- Nine language options
- Suitable for field checking of fixed instruments

Vaisala Handheld Measurement Indicator MI70 is a user-friendly indicator. When combined with a measurement probe it is ideal for field checking and calibration of Vaisala's fixed instruments.

MI70 has probes for measuring humidity and temperature, dewpoint, moisture in oil, and CO<sub>2</sub>. In addition, MI70 can be used as a display when connected to selected Vaisala transmitters.

### Multi-Probe Operation

The MI70 indicator has two cable ports by which a combination of any two probes (or transmitters) can be connected to it simultaneously. For example, a humidity and temperature probe could be connected to the one port, and a CO<sub>2</sub> probe to the other. The indicator can display the measurements made by both probes, so humidity, temperature, and CO<sub>2</sub> data could be displayed simultaneously.

### Intuitive User Interface

MI70 features a multilingual, menu-based user interface and a clear graphical LCD display. All in all three measurement parameters can be

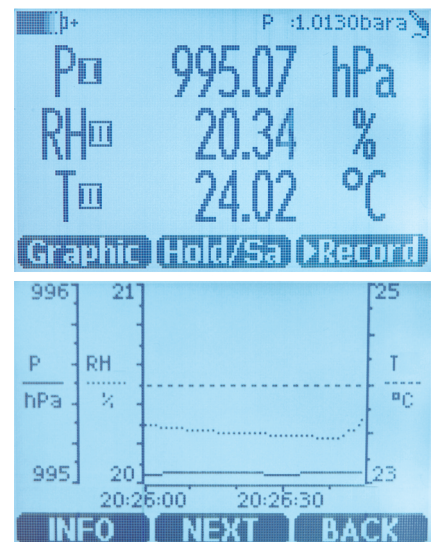
displayed and simultaneously logged in the memory. The display shows measurement trends graphically and numerically. Users can select the measurement parameters and units. MI70's intuitive user interface operates with menus and keypads to change settings, logging, and display preferences.

### Multiple Language Options

There are nine language options in MI70: Chinese, English, Finnish, French, German, Japanese, Russian, Spanish, and Swedish.

### 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



Users can select and display up to three measurement parameters at the same time. The graphic display shows the stabilization of measurement and process trends.

# Technical Data

## MI70 Measurement Indicator

Operating Environment	
Operating temperature	-10 ... +40 °C (+14 ... +104 °F)
Operating humidity	0 ... 100 % RH, non-condensing
Storage temperature	-40 ... +70 °C (-40 ... +158 °F)
Inputs and Outputs	
Max. no of probes	2
Power supply	Rechargeable NiMH battery pack with AC adapter or 4xAA size alkalines, type IEC LR6
PC interface	MI70 Link software with USB or serial port cable
Analog Output	
Scale	0...1 VDC
Output resolution	0.6 mV
Accuracy	0.2 % full scale
Temperature dependence	0.002 %/°C full scale
Minimum load resistor	10 kΩ to ground
Mechanical Specifications	
Housing classification	IP54
Housing materials	ABS/PC blend
Weight	400 g
Compatibility	
EMC compliance	EN61326-1, Portable Equipment
Other	
Menu languages	English, Chinese, Spanish, Russian, French, Japanese, German, Swedish, Finnish
Display	<ul style="list-style-type: none"> <li>• LCD with backlight</li> <li>• Graphic trend display of any parameter</li> <li>• Character height up to 16 mm</li> </ul>
Alarm	Audible alarm function
Data logging capacity	2700 real time data points
Logging interval	1 s to 12 h
Logging duration	1 min ... memory full
Resolution	0.01 %RH, 0.01 °C/°F, 0.01 hPa, 0.01 a <sub>w</sub> , 10 ppm / 0.01 %CO <sub>2</sub>

## Battery Operation Time

Typical charging time	4 hours
Operation Times	
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

## 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 SF6 gas measurements

### MM70 Moisture in Oil Probe

MMP78	Pressure tight, stainless steel probe
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### GM70 Carbon Dioxide Probes

GMH70	Handle for probe for diffusion sampling
GM70PUMP	Sampling pump for GM70

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

## Spare Parts and Accessories

### Carrying Cases

A weatherproof carrying case for HM70, DM70 and GM70 short probes	MI70CASE3
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A weatherproof carrying case for HM70 and MM70 long probes	MI70CASE4
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A soft carrying case for HM70, DM70 and GM70 short probes	MI70SOFTCASE
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<b>Transmitter Connection Cables</b>	Small probe, with 5 m cable
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MMT/HMT330, HMT120/130, DMT340, PTB330, PTU300 Series	211339
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HMD60/70 Series	HMA6070
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DMT242	27160ZZ
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DMT143, DMT143L, DMT152, MMT162	219980SP
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HMW90 Series, HMDW110 Series and GMW90 Series	
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MMT/HMT310 Series, GMP343	DRW216050SP
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GMT220, GMD20	GMA70
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HMP155	221801
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### Software

MI70 Link software with USB cable	219687
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MI70 Link software with serial port cable	MI70LINK
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### Other

Analog output cable	27168ZZ
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10 m (32.81 ft) extension cable for probe	213107SP
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Battery, NiMH 4.8 V	26755
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