

# AK40 ON-LINE MOISTURE METER



**NEW**

- Designed for paper and board plus all fiber materials
- Targeted for budget-critical projects
- Designed for easier positions in production machines
- Simple to use, accurate readings, excellent repeatability
- Wide moisture range
- Able to measure glue weight / coat weight for water-based adhesives and coatings
- Small size
- Graphic display / big numbers under the cover or visible through a window
- Wireless communications
- Data logging and analysis features in manual use
- Flash calibration for field use
- Unbeatable pricing

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**VISILAB**  
SIGNAL TECHNOLOGIES

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## Main Features

- applications in pulp, paper and boards, packaging papers, textiles, felts, filters, minerals, recycled fiber, waste paper, liners, suitable also for corrugated and soft materials
- targeted for easy positions, simple to use but has useful features for advanced work
- surface moisture in thick samples, total moisture content in thin samples (abt. 150 microns penetration in paper products)
- accuracy 0.25 %, repeatability 0.1 % or better
- wide moisture range starting from 0 %, up to about 70 %
- fast response, selectable digital filtering with 3 options, one of them adjustable and very slow, 5 points per sec sampling, low-level sampling at 72 Hz
- superior stability, based on proven ultrastable technology of Visilab, revision S now in production
- an infrared thermometer for web temperature, range 0... + 100 C
- the price is exceptionally competitive and the payback time is very short

## Data logging features

- operating distance: 5... 15 mm, no contact required
- measuring area 10 mm in diameter
- DCS analog interfaces are updated at 5 Hz
- nonvolatile memory banks for holding up to 820 sample data series with time stamp and bank number
- each series can contain up to 500 samples
- memory banks can be downloaded to a PC with a time stamp and a label
- memory banks stay for years unless erased
- graphic trend display for recent history
- trend display can be saved to a new bank with a button press
- autotimer sampling (adjustable sampling interval and batch size)
- statistics of collected values
- low noise level (typically < 0.03 % stddev at 5 % MEDIUM filter)
- a skid for measuring safely over moving webs and running rolls, no touching
- large calibration table library (100 tables) with rapid switching
- calibration with multiple points for linearization (2 - 10 points)
- table change either via PC software or manually at the keyboard
- display colours are user-adjustable for various operating modes: low intensity for energy saving, high intensity for good visibility in difficult conditions, DIM mode for dimming the displays when not actively used
- five quick switching recipes for changing to other calibrations when paper grade changes. Calibration table and a label can be preselected for each recipe
- Flash calibration to generate a workable table in all conditions
- zeroing of moisture meter if differences are of interest
- automatic conversion of calibration for dry weight percent moisture or DRYNESS

## Interfaces and physical properties

- analog outputs 0..2 V for moisture and 0..5 V for web temperature, 4-20 mA for moisture
- wireless communication via 100 meter Bluetooth, the Bluetooth adapter for the PC included
- regular RS232 via cable at 9600 (max. 40 m) or 115200 (max. 5 m) for PC's COM port
- an integral display and a diaphragm keyboard
- large numeric display and a graphic display, trend curve and values
- display colour hue is associated with crossing preset moisture levels, high or low (alarm feature)
- operating voltage 24 V 3 W
- battery-backed clock for time stamping
- dimensions: 150x270x210 mm, weight 900 g
- IP67 enclosure for harsh environments
- power supply unit for 110 - 240 VAC mains is included. It has connectors for DCS interfaces
- the free **AK30** and **AK30Mini** programs are data acquisition software for trend display, data archiving, manipulation etc. **IRMA7Basic** has more features. **Advanced** is an optional licensed program with plenty of features.
- meter can be configured in field and saved, meter starts the next session like that
- calibration tables can be saved after modification, user decides if necessary

## Ambient conditions

- operating + 5... + 60 C with air purge
- overheating protection turns the meter to LowPower
- fully temperature compensated
- IP67 case, purge air to both case and window / skid
- optical window can be cleaned if water condensation or dust, air purge used for keeping it clean
- service interval of 200 000 hours
- clock battery is replaced every 7 years if used

## Optional accessories

- glass-ensealed moisture standards
- the keyboard & display are inside the cabinet but the membrane keypanel can be outside and a window for the display for easy use. Request when ordering

## Your nearest contact:

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