



# Model AK30

## Portable Moisture Meter for Paper and Board Mills and for Other Fiber Products

You will get more than you expect from a small, smart meter

**VISILAB**  
SIGNAL TECHNOLOGIES

### APPLICATIONS:

- A simple-to use meter for laboratory and field work
- A versatile instrument with integrated features
- Measure moisture from rolls, sheets and slow webs
- Pilot machines, research and paper grade studies
- Special papers, with cotton and other constituents
- Various fiber materials, felts, textiles, minerals, wood chips, sawdust
- Small and light, easy to travel, no cables required

What would you expect to have in your portable surface moisture meter?

- A. Good reliability
- B. Simplicity of use
- C. Good stability
- D. Small size
- E. Suitable interfaces for user and data transfer
- F. Good usability in requiring field conditions

Look at what Visilab has to offer in our model AK30 portable meter:

Standard Features:

- A. Good reliability - It is built to last. All wearing parts are carefully designed and rated to gain extra margin. The service interval is 12 000 hours ✓
- B. Ease of use - Turn the meter on and start measuring. Could it be simpler? Use either the big numeric display or the smaller graphic and numeric indicators ✓

C. Good stability - It is in a unique class in stability due to its highly advanced design. We can guarantee a superior long-term stability figure. ✓

D. Small size - It is the smallest meter available. Its dimensions are abt.180x120x100 mm weighing only 500g. ✓

E. Interfaces - It connects to the world with the following:

➤ Keyboard and display with a set of three colour LCD's to get full control of the meter and see the moisture reading at the same time ✓

➤ Wireless Bluetooth and a serial port to PC (RS232 115200 bauds) with a full-featured data acquisition software **AK30, AK30Mini IRMA7Basic, IRMA7Mini** or the optional **Advanced**. These software have a great number of highly useful features for regular quality control, troubleshooting and special research purposes. The Bluetooth is able to operate at up to 100 meters distance from the PC ✓

These interfaces are all standard in every meter and can be used simultaneously. The programs follow each meter without cost ✓

F. Usability - It has keys with good mechanical sense and a tone signal feedback. The three displays are visible in bad conditions with the help of coloured background lighting, a good contrast and with all

necessary information visible. Using AK30 is simple and straightforward. The box is IP67 rated meaning splash water proof. If it gets wet while using, wipe out water from the small optical surface and continue. It has a skid on its bottom to slide smoothly over rolls and webs without leaving streaks or wearing out. All data, calibration tables and configuration data are saved to a nonvolatile memory. ✓

There is more than you expected..

AK30 has a low level measuring speed of 75 Hz which offers a good quality signal of 5 Hz, perfect for manual use ✓

Memory banks (820 of them) are built into the meter for saving data with sample intervals from 0.2 s up. This feature is good for regular sampling either in roll measurements or in field tasks without fear of running to memory limits ✓

Crude frequency analysis of web moisture signals to diagnose and identify slow oscillations is possible with the IRMA7Basic program (and the optional Advanced) ✓

Calibration - It is straightforward both in field and laboratory conditions with most regular materials.

The internal library can contain up to 100 tables which can be manipulated extensively in software. The linearity is excellent above 8%. ✓

What else does it have? Small things like:

A trend curve in one of the three displays is showing recent history. Its data can be saved by one key press to a memory bank ✓

A numeric display with large digits, quickly switched from trend display ✓

High immunity to external infrared radiation ✓

High immunity to external water vapor ✓

The PC programs have features for acquiring moisture data for archiving, reporting and display ✓

An extremely low noise level in moisture readings, three filter options ✓

Wide moisture range (0...>70% total) ✓

A digital filter with three passbands for web noise cancellation ✓

Battery operation for at least 4 hours before recharging is required ✓

A highly competitive price, a quick ROI ✓

A spot size of 10 mm in diameter allowing for exceptional profile studies and small scale phenomena ✓

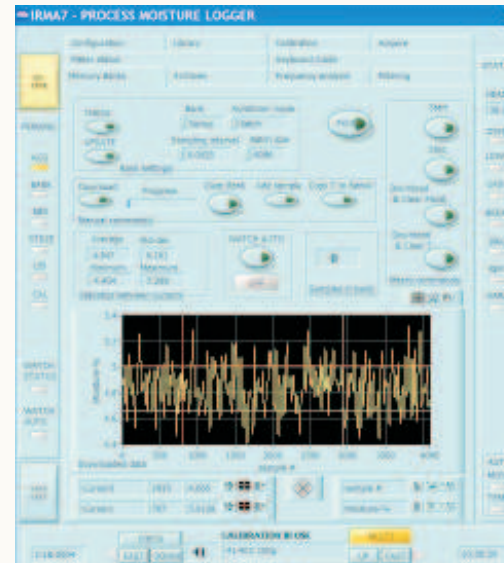
The sleep mode allows for automatically turning to Low Power mode after one hour of use ✓

The optional licensed Advanced program with greatly extended analysis and postoperation features is available to all customers at a low-cost one-time fee with free updates for lifetime and millwide use ✓

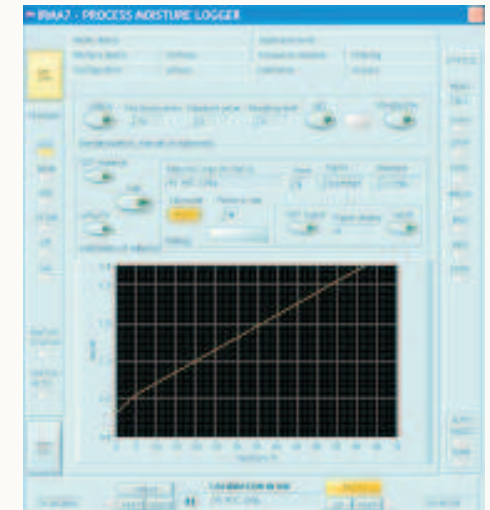
All software are Windows 7/Vista compatible ✓

Memory banks keep the data with the date and time stamp. Saving is done either with a single key press (display contents, 64 points) or at regular intervals. The internal autotimer takes the samples (1 to 500 per bank) and it can be triggered by a key or a software command at a PC. The data may be kept in the meter for a long time ✓

The display background colour changes after crossing a preset high or low level (alarm feature) ✓



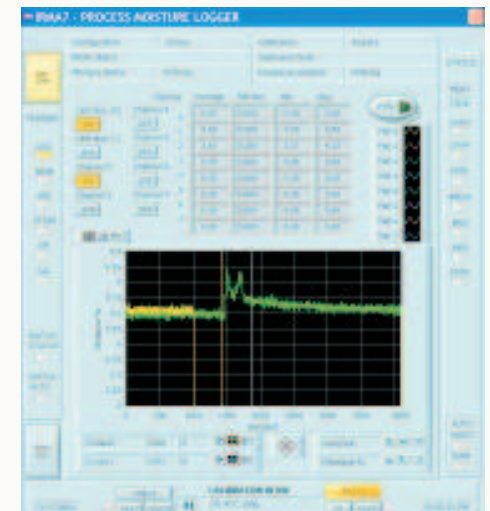
Memory banks for collecting and archiving data can be downloaded to IRMA7Basic

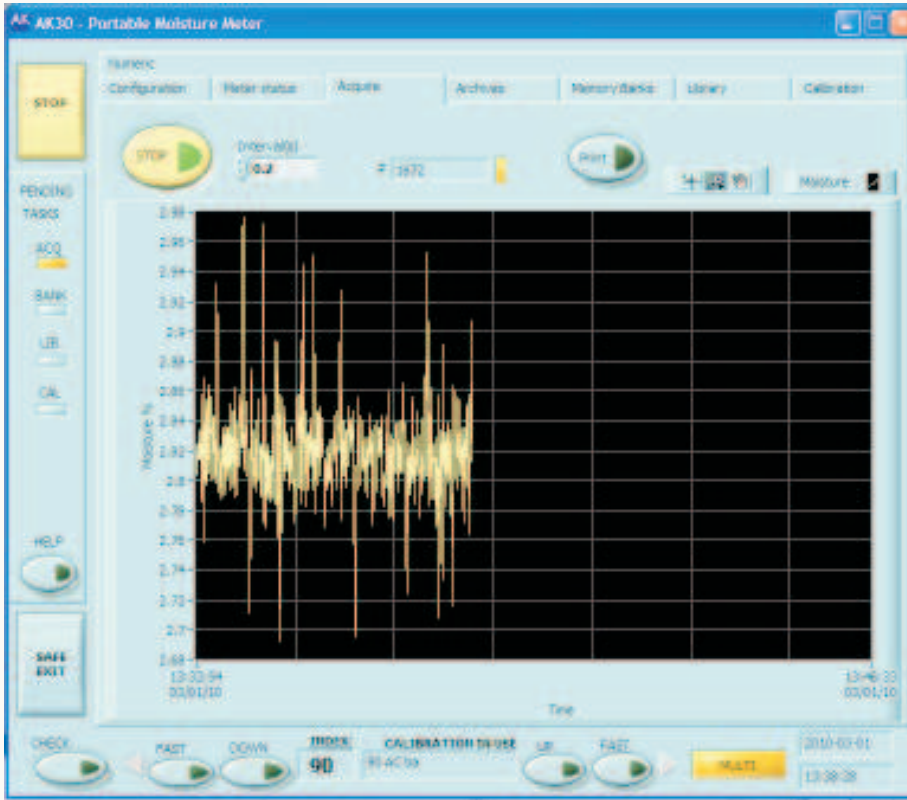


Calibration and archives tasks in IRMA7Basic



4 Memory bank task in IRMA7Mini

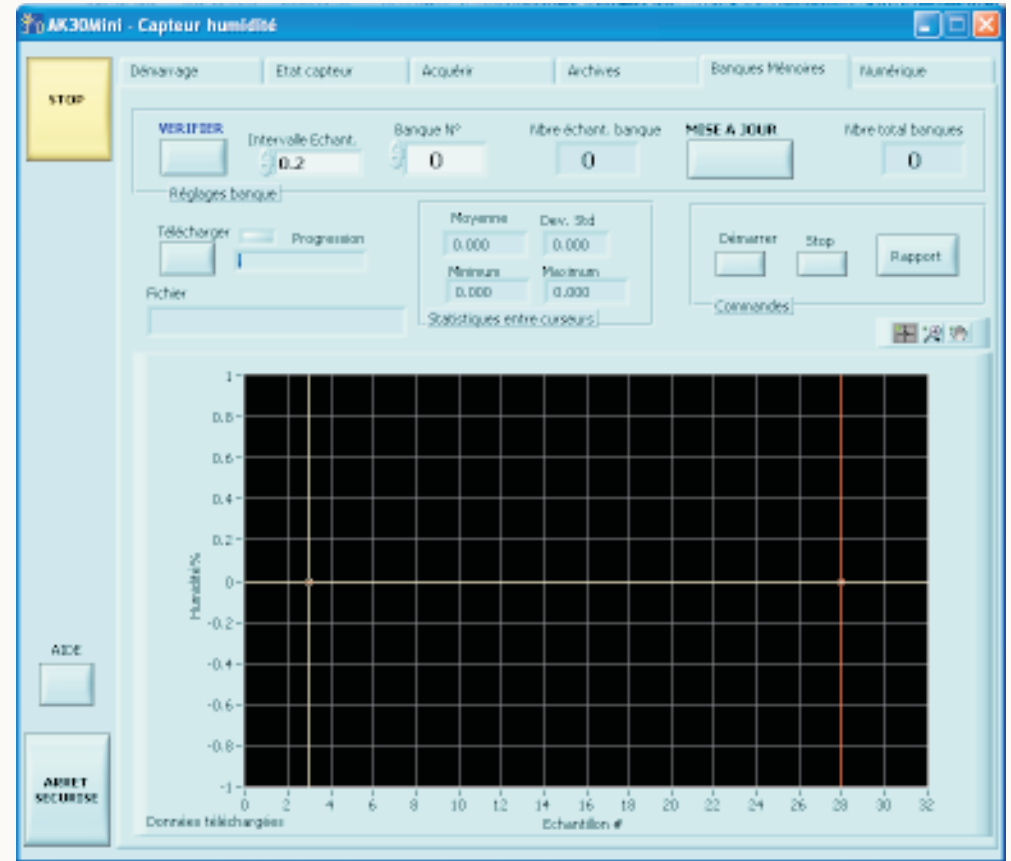




Moisture acquisition in AK30 program

The colour changes according to various operating modes (5 of them). The colours are user changeable to match requirements in contrast or power saving ✓

There is a HOLD button too to keep the latest value frozen to display ✓

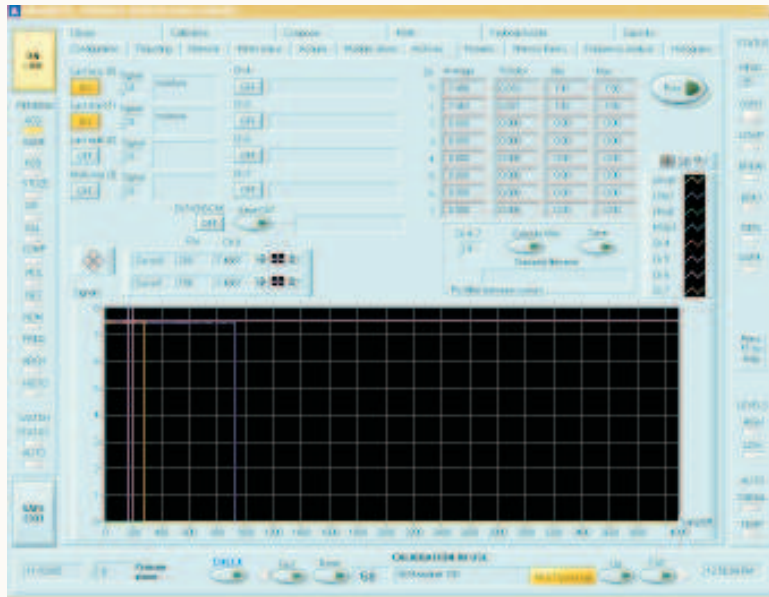


Memory banks page in AK30Mini (French version)

**A special feature:** Data collected to memory banks can be analysed statistically in batches. This is highly useful. It gives a simple and immediate support if one wants to average the two sides of boards and other thicker materials or make a consistent conclusion of a number of measurements made (max 64 banks) ✓

Are these specifications sufficient for you?

Now, what is keeping you from asking for more data and a price offer?



Archives task in **Advanced** program. It has file retrieval, incoming signals, piecewise filtering of data, statistics, channel difference calculation etc., all on the same page at your fingertips.

AK30 is the best portable moisture meter available:

- Simplest to use
- Lowest cost
- Smallest and most compact, very small spot
- Contains a large number of useful features
- Easy-to use support software
- A large number of field applications

**Portable moisture meters** made by Visilab Signal Technologies have been sold to a large variety of applications since 1994: From paper and machine research to troubleshooting and regular quality control and rough field use. The applications range from SC, board and newspaper to nonwoven, fabrics, note papers, special papers, sawdust and wood chips and printing. They have been used frequently in research studies made by universities and research institutions.

Find latest news and other up-to date material on our web pages:

[www.visilab.fi](http://www.visilab.fi)

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