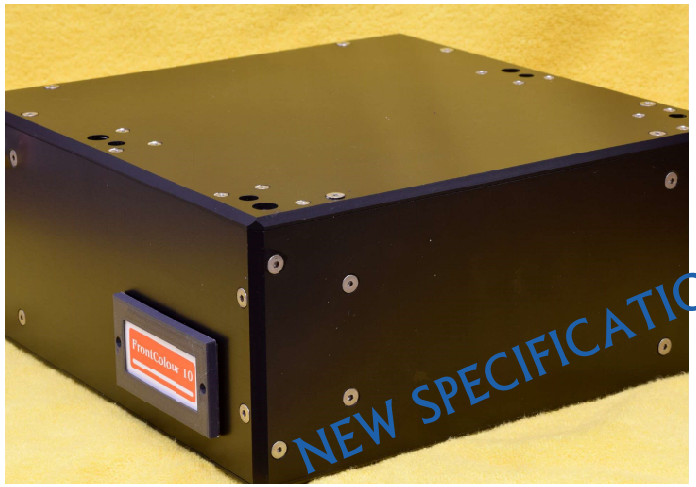
AK50E

One-Sided On-Line Moisture Meter for Paper and Board Mills - a Wide Range of Applications



You will get more than you expect from a small meter

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GOOD FOR THESE:

- ➤ Paper machine quality control after press section
- ➤ Pilot paper machines, research and paper studies
- ➤ Coating control
- ➤ Fixed or scanner installations
- ➤ High spatial accuracy profiles thanks to the extremely small spot
- ➤ Various fiber materials, felts, textiles
- ➤ Moisture and temperature profiles
- ➤ Piecewise materials, sheet cutters, sheet printers
- ➤ This is an economy model with an unbeateble price

What would you expect to have in your on-line moisture meter?

- **Good reliability**
- **Ease of use**
- **Good stability**
- **Small size**
- **Suitable interfaces for mill automation**

Look at what Visilab has to offer in our **AK50E** on-line meter:

Standard Features:

Good reliability - It is built to last. All wearing parts are carefully designed and rated to gain extra margin. The service interval is 175 000 hours (about 20 years) of continuous use.

Ease of use - Fasten the meter to its final position, connect the cables, install the software and start measuring. Could it be simpler?

Good stability - It is manufactured according to our new ultrastable technology. We can guarantee a superior long-term stability figure.

Small size - Its dimensions are 275x275x120 mm. It includes **all** electronics. No control boxes are required. You can install the meter into quite new positions.

Interfaces - It connects to the world with the following:

- **Two analog outputs**, scalable and selectable as 0...+10V, +/-5V or 0...+5V, available signals are moisture and web temperature plus some secondary signals, selectable. One channel 4-20 mA signal

- **Serial port** to PC (RS232 with 9600/115200 bauds) with a full-featured data acquisition software **Advanced**. The software have a great number of useful features for regular quality control, troubleshooting and special research purposes.

These interfaces are can be used simultaneously

There is more than you expected..

Speed of measurement - AK50E has a great measuring speed. It operates at a rate of **400 Hz** supplying fresh data into all interfaces with the same speed, including the analog outputs. This feature also makes it possible to do measurements of targets you have been only dreaming of. An example would be a sheet cutter. High speed means fast response times to moisture changes and more coverage for the web.

Memory banks - Five memory banks (4 kilosamples + 4 x 1 kilosamples) are built into the meters for saving data with full speed (sample intervals from 10 ms to 32000 s). The internal autotimer takes the samples and it can be triggered by software or hardware to start sampling. This feature allows frequency analysis of web moisture signals to diagnose and identify oscillations. This is a very useful tool for preventive mainte-

nance. Regular felt or roller condition follow-up can save you a lot of money. And this does not burden the regular use of the meter. You can realize from the frequency display some new peak and start finding out the cause for the moisture variation by matching the frequencies of rotating parts, like rollers and felts.

Calibration -It is straightforward both in field and laboratory conditions. The internal library can contain up to 100 tables which can be manipulated in the software. The linearity is excellent above 8%.

What else does it have? Small things like:

Extremely low noise level.

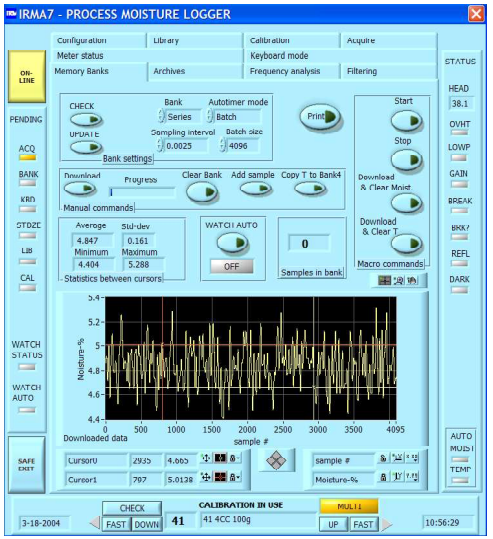
High immunity to external infrared radiation to and other external lights

An exceptionally small spot size of 12 mm in diameter. This is new and at the cost of limiting the working range to 250 +/- 15 mm, other ranges at request

High immunity to external water vapor

A large moisture range (0...>70% total)

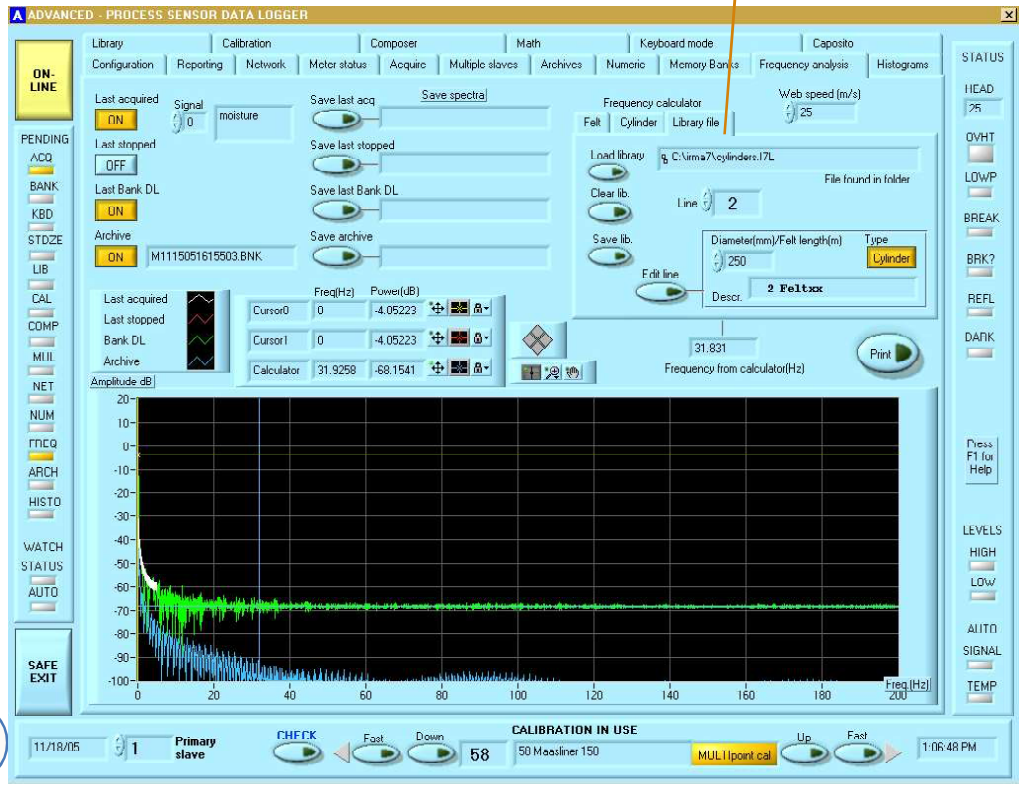
Good immunity to target angle



Memory banks for collecting and archiving fast data

Study periodic moisture variations while doing regular quality control

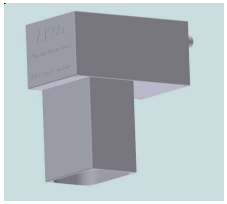
A simple-to use frequency calculator for recognizing roller and felt originated frequencies. One can even save information from up to 100 cylinders and felts.



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A digital filter with various passbands for frequency analysis to match response speed and process noise

An optional nose box for the enclosure for most requiring conditions, preventing dust and condensation



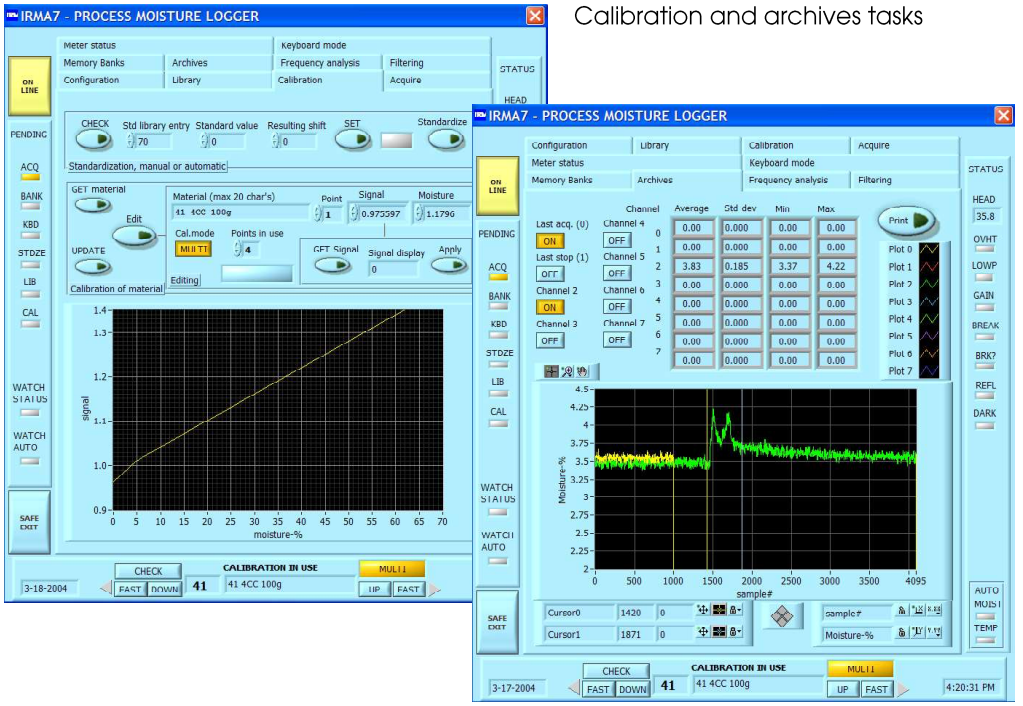
A very low power consumption of 10 W - no need for water cooling, air purge is quite sufficient for all conditions with the nose box

A really competitive price

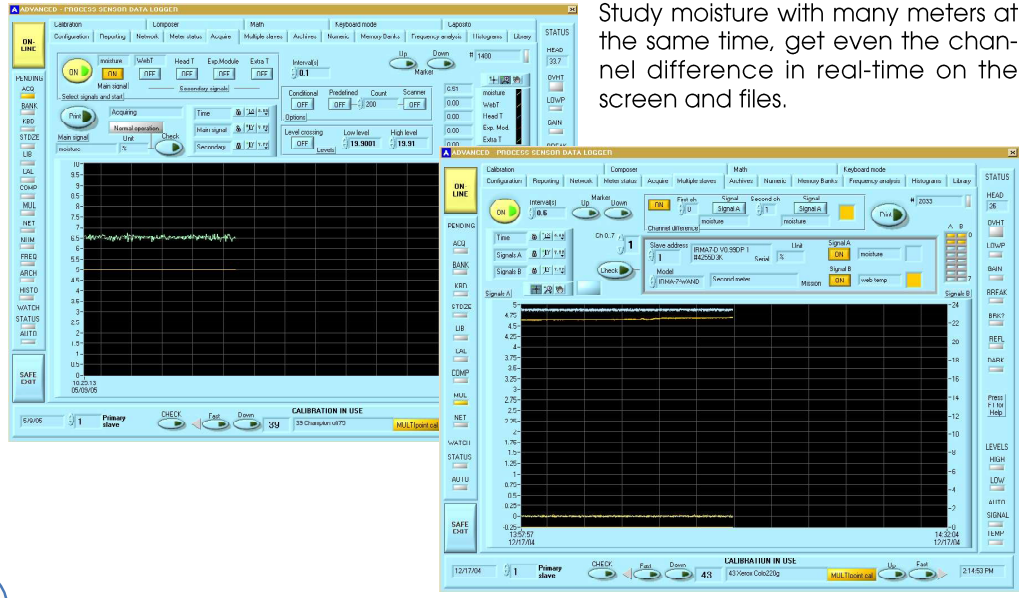
Signal Quality system showing external threatening effects from dirt or overheating etc. This signal can be retrieved from the meter with others.

Optional accessories:

LAN232 - for connecting up to eight meters to create a simple sensor network, for data acquisition. It uses the RS232 communication lines at 9600 or 115200 bauds (all sensors at



Calibration and archives tasks



Study moisture with many meters at the same time, get even the channel difference in real-time on the screen and files.

the same speed and with different LAN addresses).

A web thermometer - Its data can be retrieved to any interface and measures directly the target with no window in between.

External standardization to prevent effects of dirty glasses - we can offer external moisture standards for tracking regularly the meter's possible dirt accumulation. Usually the buyer himself prepares some sort of mounting for this simple device made of glass.

Two laser spots for helping to adjust the meter's working distance

Wireless - a Bluetooth module for up to 100 m links

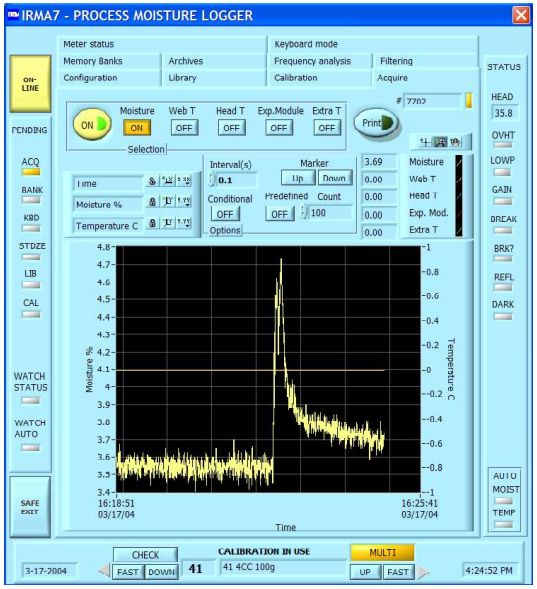
Fully protected enclosure - inquire for the extra tough box with Vortec cooler and nose box

Vortec cooler is an optional accessory

An excellent power supply unit with all interface connectors needed, most simple to use, see below



Study moisture transients while doing regular quality control



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AK50 is the best on-line moisture meter available:

- ➤ ABsolutely the lowest cost
- ➤ Smallest and most compact
- ➤ Contains the largest number of useful features
- ➤ Fast 400 Hz
- ➤ Easy to use support software with several useful tools
- ➤ Excellent capability of measuring piecewise and batch production machines

Visilab's moisture meters have been sold to a large variety of applications: From paper and machine research to troubleshooting and regular on-line use, fixed and scanners. The applications range from SC, board and newspaper to nonwoven, fabrics and printing. Visilab is cooperating with other companies to deliver complete systems with data bases, user interfaces and factory automation.

Are these specifications sufficient for you?

Now, what is keeping you from asking for more data and our price list?

Find latest news and other up-to date material on our web pages:
www.visilab.fi

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