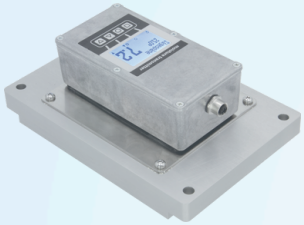
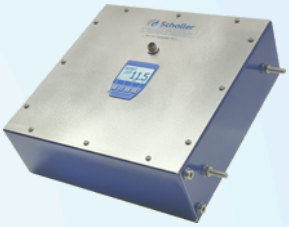
Schaller

Messtechnik / www.humimeter.com













BIOENERGY













İklim/ Çevre | Gıda | Biyoenerji | Malzeme | İnşaat | Kağıt ve karton

EXCLUSIVE DISTRIBUTOR

LOCATION

LONCA MAK. SAN. TİC. A.Ş.

Ferhatpaşa Mah. Gazipaşa Cad. No:104A
34888 Ataşehir / İSTANBUL - TURKIYE
Phone:+90 216 505 05 55
www.ensim.com.tr / lonca@ensim.com.tr

WEB

78,0 °F | 6,16 % | 456 kg/m3 | -27,3 td | 0,64 aw | 51,9 %r.H. | 14,8 % abs | 100,4 g/m2 | 09 m/s | 4,90 Ugl | 163 ym | 23,2 °C | 78,8

humimeter BL2

universal biomass moisture meter

measuring instrument for wood chips insertion probe, ram electrode for round timber and split logs or special probe. For measuring round timber, split logs, wood chips, sawdust, wooden pellets, shredded olive stones, hay and straw bales





Features

- Measuring range: depending on the sensor up to 60% water content (depending on the material)
- Resolution: depending on the sensor
- Temperature can be set to °C or °F as required
- Hold function, manual saving of results, datalog for up to 10,000 logs with measuring point report
- Measurement within seconds
- Large measuring depth
- Automatic temperature compensation
- Large, well-lit LC display
- Scope of supply: *humimeter* BL2 with rubber protection cover and batteries
- Required accessories: measuring probes

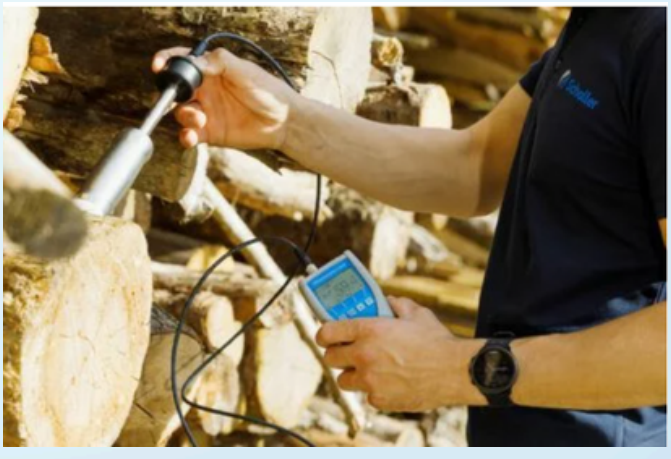
Handling / measuring procedure:

Measuring procedure with *humimeter* BL2 ram electrode for round wood and split logs

Switch on the device, select the right wood type (calibration curve) and drive the ram or hand electrode into the wood, in the right angle to the grain. Water content and temperature can immediately be read off the large, well-lit display and saved or edited via integrated datalog if required.

Measuring procedure with *humimeter* BL2 insertion probe for wood chips, sawdust, pellets and shredded olive stones

Switch on the *humimeter* BL2 and select the right calibration curve. Insert the probe straight into the wood chips pile. Water content and temperature can immediately be read off the large, well-lit display and saved or edited via integrated datalog if required.

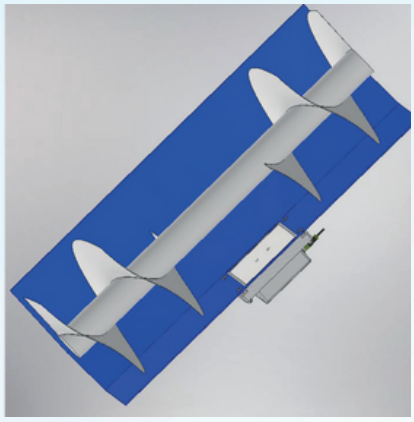


BLC humidity transmitter

Online moisture sensor for water content determination of wood chips, pellets, sawdust and other materials Ideal for pellet manufacturers, chipboard producers or wood gasification plant operators







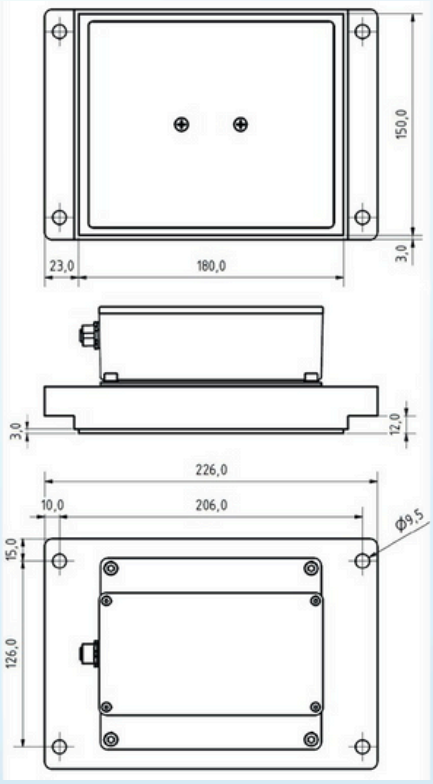
BLC humidity transmitter Ready-calibrated system for continuous real-time water content determination. Designed to be directly installed in the material stream in a screw conveyor or bunker..

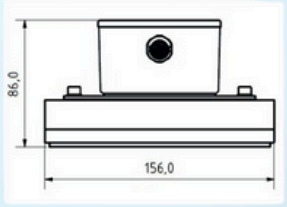
Online water content determination:

With the BLC moisture transmitter, online water content determination is possible from dry to highly moistened material (2 to 60 % water content). The BLC transmitter is often used in wood gasification plants for process optimization or in pellet/chipboard production to determine the exact water content in real-time during the production process.
BLC moisture transmitters can also be integrated into existing plants very easily.
The connection to a control system can be realized using a 4-20mA analog output. Analogausgang durchführbar. As the BLC moisture transmitter for online moisture measurement of wood chips, shavings and pellets is already fully calibrated, setup can be realized easily.

Technical data

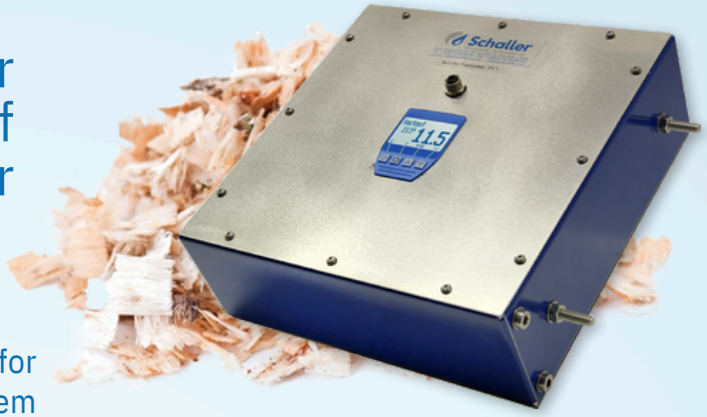
- Measuring range wood chips: 2 - 60 % water content (corresponds 2 - 150 % wood moisture)
- Measuring range pellets: 2 - 20 % water content
- Measuring range sawdust 2 - 60 % water content
- Resolution 0,1 %
- Measuring range temperature -10 °C to +70 °C
- Temperature range for water content determination: 0 to +50 °C
- Automatic temperature compensation
- Illuminated display
- Supply 24 VDC (15 to 29 VDC)
- Analog outputs 4 to 20 mA for water content and optionally for temperature
- Dimensions: 226x156x86 mm
- Weight: 2,5 kg
- Protection class: IP54



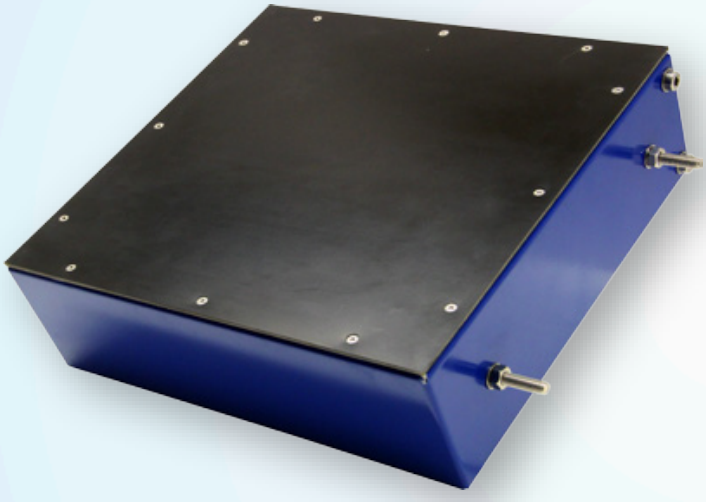


BRC moisture transmitter

Online moisture transmitter for determination of water content of dry wood chips, e.g. suited for wood gasification plants



for determination of water content of dry wood chips, for direct installation in a chip bunker or in the discharge system of push floor conveyors

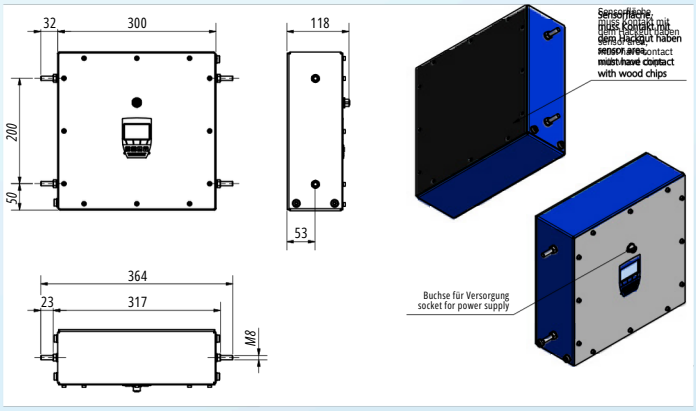


Features

- Measuring range 2 - 30% water content (represents 2 - 43% wood moisture)
- Resolution 0.1%
- Temperature range for determination of water content: 0 to +50°C/32 to 122°F
- Automatic temperature compensation
- For wood chip classes P16 to P100
- Close contact of material to measuring surface is essential
- Illuminated display
- Protection class: IP52
- Power supply 24VDC (15 to 29VDC)
- Analogue outputs 4-20mA for water content and optionally for temperature
- Dimensions: 364x300x118mm
- Weight: 3.7kg

Online determination of water content:

The BRC moisture transmitter enables the facile on-line determination of water content of dry wood chips. The BRC transmitter can easily be integrated in existing plants and is also suited for measuring coarse material (up to wood chip class P100). This enables the optimal control of a dryer, boiler or wood gasification plant with respect to the water content. That way the efficiency of your plant can be increased, energy consumption for drying can be reduced, which in general means rising efficiency and the fabrication of a product of higher quality. The connection to a control system can be realised via the 4-20mA analogue output. As the BRC mois- ture transmitter is readily calibrated, the installation can be realised with a modicum of effort.



humimeter BLL

Moisture meter with insertion probe for determi- nation of water content of wood chips

for an easy determination of water content and temperature of deeper layers





Handling / measuring procedure

Switch on the instrument and select the calibration curve corresponding to your material. Insert the measuring head of the device straight into the wood chips. The illuminated display immediate- ly shows the water content and temperature of the material. The instrument offers a data logger for up to 10,000 measuring values as well as the possibility to enter additional data, for example a batch number. For every saved measurement series, the device automatically calculates the average. Via the optionally available USB interface the measuring values can be transferred to a PC. With the included LogMemorizer software the data can be archived, exported and processed.



Features

- Length of insertion probe: 1 meter
- Measuring range: 10 % to 50 % water content (depending on the material)
- Resolution: 0.5 % water content
- Calibration accuracy to reference material: +/- 2.5 %
- Temperature measuring range: -10 to +80°C
- Automatic temperature compensation
- Operating temperature range: 0 to +40 °C
- Hold function
- Datalog for 10.000 logs, measuring point report
- Power supply: 4 x 1.5 Volt AA Alkaline batteries
- Menu languages German, English, French, Italian, Spanish, Portuguese, Czech, Polish, Russian
- Device dimensions 1155 x 75 x 45 mm (without handle bar)
- Weight: 830 g
- Scope of supply: humimeter BLL with rubber protection cover, grab bar made of steel and batteries
- Optional: humimeter USB data interface module with LogMemorizer measuring data recording and analysing software on USB flash drive, portable printer, wooden case
- Art. no.: 12029



Benefits

- very easy handling
- measurement within seconds
- determination of water content also in deeper layers
- datalog function
- USB interface and printer (optional)

humimeter BMA-2

Professional moisture meter for determination of water content of biomass

with optional display of bulk density and bone dry weight (tons/m³), for suppliers and operators of biomass heating plants



Handling and measuring procedure:

Completely fill the measuring chamber of the *humimeter* BMA with the material to measure, select the appropriate calibration curve and press the Start button. The entire measuring process is completely automatic. Within 30 seconds the wa- ter content, sample temperature, and optionally also bulk density and bone dry weight, are shown on the well-lit display. Via the integrated datalog the measuring values can be stored and additional data like supplier or batch number can be added.

Optionally, the *humimeter* BMA can be delivered with USB interface for connecting the device to a PC. The included LogMemorizer software can read off the measuring values from the device, addition information can be added, and the data can be archived, exported and processed.



Professional moisture meter for determination of water content of biomass

for measuring wood chips, wooden pellets, elephant grass, wood shavings, sawdust and maize cobs

Features

- Quick and fully automated measuring procedure without prior treatment of samples
- Measuring range 5% to 70% water content, depending on the material
- Resolution: 0.1% water content
- Calibration accuracy to reference material: +/- 1.0%
- Bulk density compensated by integrated scale
- Infrared sample temperature measurement, automatic temperature compensation
- Temperature range for measuring: 0 to 50 °C / 32 to 122 °F
- Temperature can be set to °C or °F as required
- 12 litres sample volume
- Manual saving of results, datalog for up to 10,000 logs with measuring point report
- Well-lit LC display, robust housing
- Automatic averaging
- Scope of supply: *humimeter* BMA with measuring chamber and power supply unit
- Optional: *humimeter* USB data interface module with LogMemorizer measuring data recording and analysing software on USB flash drive, display of bulk density and bone dry weight, integrated printer, rechargeable batteries

humimeter BMC

Moisture meter for determining the water content of wood chips

For suppliers and operators of biomass heating plants



Moisture meter for determining the water content of wood chips

Measuring procedure:

Switch on the instrument and select the calibration curve corresponding to your material. Completely fill the measuring chamber with wood chips, using the delivered plastic bucket. Remove protruding wood chips so that the material is even with the top edge of the measuring chamber. The illuminated display immediately shows the water content and temperature of the material. The instrument offers a data logger for up to 10,000 measuring values as well as the possibility to enter additional data, for example a batch number. For every saved measurement series, the device auto- matically calculates the average. Via the optionally available USB interface the measuring values can be transferred to a PC. With the included LogMemorizer software the data can be archived, exported and processed.



Akkreditierte Prüfstelle:

Our test laboratory conforms to the requirements of the globally valid standard EN ISO/IEC 17025:2007. In 2016, the laboratory was certified as an accredited test laboratory for the determination of water content according to norm EN ISO 18134-2: Solid biofuels - Determination of moisture content - Oven dry me- thod. The requirements necessa- ry for obtaining and preserving the accreditation ensure maxi- mum testing quality.

Features

- Measurement within seconds, simple handling
- Measuring range 5 % to 50 % water content, depending on the material
- Resolution 0.5 %
- Calibration accuracy to reference material: +/- 1.5 %
- 12.5 liters sample volume
- Temperature can be set to °C or °F as required
- Automatic temperature compensation
- Temperature range for determination of water content: 0 to +40 °C / 32 to 104 °F
- Scope of supply: humimeter BMC with plastic bucket and batteries
- Optional: humimeter USB data interface module with integrated rechargeable battery and LogMemorizer measuring data recording and analysing software on USB flash drive, portable thermo printer
- Article no.: 13880



humimeter BP1

pellets moisture meter for quality control in manufacturing, temporary storage and reception inspection of wood pellets as well as special pellets (thistle, straw, rape, elephant grass, ...)



Handling / measuring procedure: To guarantee precise measuring values in the long run, after switching on the *humimeter* BP1 automatically effects a self-calibration. After that choose the corresponding calibration curve for your material to measure. Fill the measuring chamber with the corresponding quantity of material.

Water content and temperature can immediately be read off the large, well-lit display of the *humimeter* BP1. Via the integrated datalog the measuring values can be stored and additional data like supplier or batch number can be added. Optionally, the *humimeter* BP1 can be delivered with USB interface for connecting the device to a PC. The included Log-Memorizer software can read off the measuring values from the device, addition information can be added, and the data can be archived, exported and processed.



Your benefits

• Self-calibration after switching on • Measurement within seconds • No preparation of samples necessary • Non-destructive measurement



Features

- Measuring range 3 to 20% water content
- Resolution 0.1% water content
- Calibration accuracy to reference material +/- 0.5%
- Temperature can be set to °C or °F as required
- Hold function, manual saving of results. Datalog for up to 10,000 logs with measuring point report
- Suppliers data and batch number can be recorded
- Automatic temperature compensation
- Large, well-lit LC display
- Robust stainless housing
- Scope of supply: *humimeter* BP1 with rubber protection cover, digital scale, plastic case, measuring cup and batteries

V1.0