



Moisture Measurement & Control From Lab To Line

868 LABORATORY MOISTURE SENSOR

Laboratory Moisture Sensor for
Measurement Control

Snack Food
 Chemical
 Polymers
 Plastics
 Mineral
 TOBACCO
 Food
 OILS
 Wood
 PLASTIC PAPER
 Food
 PROTEINS
 RENEWABLE ENERGY
 Bio-mass
 COATWEIGHT
 Thickness



Laboratory Moisture Sensor for Measurement Control

AT LINE 828 WIDE ARRANGE OF APPLICATIONS INCLUDE:

- ✓ Adhesive
- ✓ Animal Food
- ✓ Bio-mass
- ✓ Chemicals
- ✓ Coating
- ✓ Converting
- ✓ Food
- ✓ Forest Products
- ✓ Grains
- ✓ Hog Fuel
- ✓ Minerals
- ✓ Paper
- ✓ Pharmaceuticals
- ✓ Plastic
- ✓ Renewable Energy
- ✓ Snack Food
- ✓ Sugar
- ✓ Textiles
- ✓ Tobacco
- ✓ Web
- ✓ Wood Products
- ✓ And Many More



PRODUCT INFORMATION

The 868 NIR (Near Infrared) Moisture Sensor is MoistTech's at-line moisture sensor with a large rotating sampling dish for the rapid moisture analysis of raw and non-homogeneous materials. Precision filters and algorithms have been incorporated into the sensor to optimize performance under the demanding conditions in the manufacturing industry. The 868 Sensor incorporates MoistTech's well-proven IR-3000 optics and electronics providing superb accuracy, and resolution of any similar technology gauge. Unsurpassed in performance, stability, reliability, maintainability and cost of ownership the 868 Sensor is the answer to controlling moisture in your product.

Ideal for laboratories or near processing lines MoistTech's 868 Sensor features a removable, rotating sampling dish, available in a variety of sizes that was designed for rapid moisture determination of non-homogeneous products and raw materials. Due to the large sample size, the 868 has greater accuracy of any other laboratory NIR sensor on the market within 0.1% and as fast as 3 seconds.

With the 868 Sensor you will dramatically improve product quality, providing both energy savings and potential increased productivity with lower material losses. Additionally, it has a one-time calibration, maintenance free, drift free optical design that allows operating personnel to confidently make immediate process adjustments based on real-time measurements.

NEAR INFRARED (NIR) TECHNOLOGY

All molecular bonds absorb specific wavelengths of light. Hydrogen bonds including O-H (water); C-H (hydrocarbon) and N-H (ammonia) all absorb strongly in the NIR spectral region. The amount of NIR energy reflected at a given wavelength is inversely proportional to the quantity of absorbing molecules in a product.

The NIR technique is a non-destructive, non-contacting measurement. MoistTech's sensor utilizes multiple wavelengths of NIR light, projected onto the product at a very high repetition rate. The reflected light is then measured using a digitally enhanced detection system and thousands of data points are sampled every second.

WHY 868 SENSOR?

- Low Cost
- Highest Accuracy
- Newest Technology
- Removable Sampling Dish
- Easiest Installation & Calibration
- Very Low Maintenance
- Most Advanced Software
- Surface Mount Electronics

KEY BENEFITS FOR USERS:

- Improved product quality*
- Improved process efficiency*
- Fast results*
- Lower energy costs*
- Less waste*

APPLICATIONS

MoistTech has the worldwide reputation for its exceptionally accurate NIR (near infrared) sensors and software for moisture testing and measurement and control. The newly developed 868 Moisture Sensor and software can be configured and calibrated for numerous components in virtually any application.

SENSOR DISPLAY

The 868 Sensor incorporates a large color-touch-screen PLC that offers the ability to set sampling times, calibration of up to 50 different product codes and data storage that is downloadable to your PC.

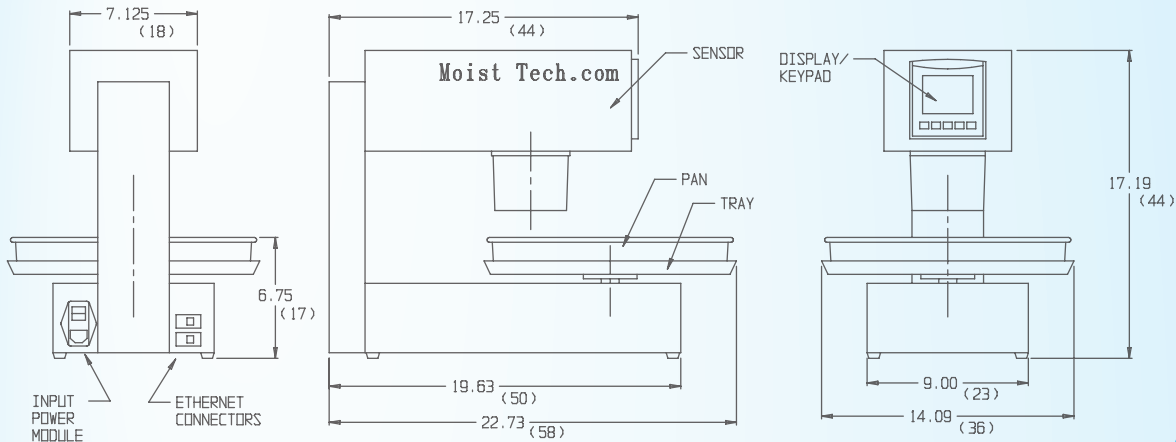


STANDARD FEATURES INCLUDE

- 16-bit data resolution for unsurpassed accuracy and response
- Built in Touch-Panel with PLC/HMI
- Pre-programmed measurement algorithms and calibrations
- Customized NIR filter selections for your application
- Ethernet Connectivity (2 3 RJ45)
- Non-volatile FLASH data storage 1 Removable
- 13" Sampling Dish
- 2-year warranty parts and labor

868 TECHNICAL INFORMATION

- Non-Contact
- Advanced digital filtering for noise free signal
- Very low energy use
- Surface Mount Technology
- Simple calibration procedure
- No routine recalibration needed
- No routine maintenance needed
- 50 products codes available



SENSOR SPECIFICATIONS

Measured NIR Constituents:
Moisture Ranges:

1, 2 or 3
0–0.1%, 0–100% and PPM Ranges Subject to Application
Accuracy (subject to application): $\pm 0.1\%$
 $\pm 0.05\%$

Repeatability:
Color Display:
Calibration Codes:
Measurement Response Time:

3.6-inch, 9 cm LCD with touch-screen input
50 Standard, Stored in non-volatile Flash memory
Default to 11 seconds and as fast as 3 seconds

Weight:
Enclosure:
Dimensions:
Power:
Sample Holders:
Networking:
Operating System:
Outputs:
Calibration:

24 lbs
Durable Steel with beige powder coat paint
23cm (9in) D x 50cm (20in) W x 43cm (17in) H
115–230VAC 50/60Hz 30W
13" D x 2" H-Standard, Also available 9", 7", 5"
2-Ethernet TCP/IP Ports
Internal PLC/HMI
Data Transfer to PC Based Excel Worksheet
Factory Pre-Calibrated (Routine re-calibration is not required)

Reliability:

System Warranty 2 years. Lamp and Motor Lifetime (MTBF 15 years)

**Above specifications are subject to application*

