



NIR 6000

Industrial Grade NIR Moisture Analyzer



Improve Process Control
Reduce Energy Costs
Reduce Product Waste
Improve Quality Control



SENSORTECH'S NIR 6000

The NIR Series can be configured to measure coating thickness, oil, protein, and many other compounds.

Industrial Grade

The NIR Series are Moisture Measurement and Control Systems designed for the continuous monitoring of your product using Near Infrared Reflectance (NIR) technology. Its rugged design provides accurate, real-time and non-contact measurements in the most demanding manufacturing environments. The NIR Series extends the range of Sensortech's precision industrial grade products.

Reliable Performance

Sensortech is unique in its ability to deliver dependable performance through its advanced NIR technology, leading edge manufacturing processes, and comprehensive testing and quality control standards. A thorough emphasis on durability was placed on the NIR Series during its development to ensure Sensortech's high standard of performance.

Full Integration

We at Sensortech recognize that every manufacturing process is unique and your needs are no exception. The NIR Series of moisture analyzers offer an array of interfaces that accommodate: water immersion, protection from dust, and severe temperature. Additionally, we manufacture numerous application interfaces and options designed to integrate the NIR Series into your particular manufacturing process.



Applications Include:

Foods

Beet & Citrus Pulp
Cereal & Grains
Cheese
Chocolate
Coffee & Tea
Cookies
Crackers/Biscuits
Milk Powder
Nuts, Almonds, Cashews, Peanuts, etc...
Pet/Animal Food
Potato Powder/Granules
Spent Grain
Sugar

Textiles

Carpets & Felts
Organic & Synthetic Wovens
Dye Lines & Finish Lines
Tows & Yarns

Chemicals/Minerals

Acetate
Bauxite & Coal
Cellulose
Cement & Sand
Ceramics
Chalk
Crumb Rubber
Detergent
Fertilizer
Fiberglass
Foundry
Granular Material
Iron Ore
Laminated Glass
Salt
PVB Sheet
Powders
PVC
Sinter
Soap Flakes & Powders

Biomass

Bark
Hog Fuel
Raw Material
Saw Dust
Wood Chips & Shavings
Wood Fibers & Flakes
Wood Pellets

Wood Products

Coating Measurement
Fiberboard
Flakeboard
Hardboard
Medium Density Fiberboard (MDF)
Oriented Strandboard (OSB)
Particleboard
Resin
Veneer

Converting

Carbonless
Coatings
Converting
Corrugating Control
Hot Melts
Paper
Plastic Film Thickness
Pressure Sensitive
Remoisturizing
Wax Coatings
Nonwovens

Tobacco

Cut Tobacco
Filler & Stems
Lamina
Cigar Tobacco
Reconstituted Tobacco
Whole Leaf Tobacco
Snuff Tobacco

ASK ABOUT OUR COMPREHENSIVE PRODUCT LINE

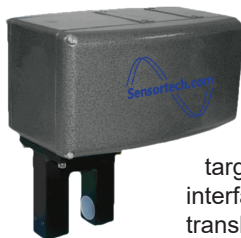
Sensortech manufactures a variety of moisture analyzers designed for numerous applications. The following analyzers are among our most popular specialty instruments designed for effective moisture measurement across a diverse range of manufacturing requirements. Sensortech provides solutions to the most challenging manufacturing environments.

SNORKEL SAMPLER

The NIR Series of moisture analyzers include a variety of application interfaces, options, and accessories designed to optimize your moisture measurement accuracy. The illustration to the left shows a Standard NIR 6000 analyzer having a SNORKEL SAMPLER option that provides an intelligent method of product sampling.

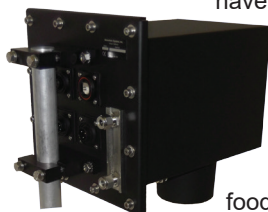


SPECIAL TRANSMISSION



The NIR 6200 Series of moisture analyzers have been developed for applications requiring a moisture measurement within a 10mm target area. The Special Transmission interface of the NIR 6210 is ideal for translucent products such as sausage casings or for web applications.

HARSH ENVIRONMENT



The IP67 rating of the NIR 6300 Series have been developed to withstand wash-downs, High Temperature, and is protected against the effects of immersion. Its rugged stainless steel enclosure makes it ideal for HARSH ENVIRONMENTS, High Temperature and food applications.

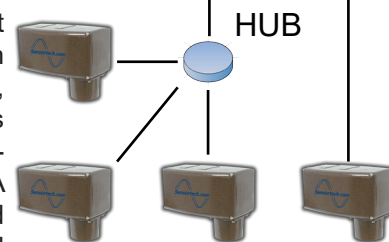
NIR Series Includes:

- NIR 6000 Industrial Grade
- NIR 6100 Food Grade
- NIR 6200 Narrow Beam
- NIR 6300 Harsh Environment
- NIR 6400 Explosion Proof
- NIR 6500 Laboratory
- NIR 6700 High Sensitivity
- NIR 6800 Tobacco Grade
- NIR 6900 Special/OEM

The NIR Series can be used as a Stand-Alone instrument or in a networked Multi-Sensor Configuration



The NIR Series product line is equipped with Ethernet TCP/IP, RS-232, and RS-485 protocols in addition to three self-powered isolated 4-20mA outputs; these standard features are included with every analyzer.



Optionally, Sensortech offers additional protocols at your request: PROFIBUS, PROFINET, EtherNet/IP, DeviceNet, and Modbus.

Intelligent Sampling

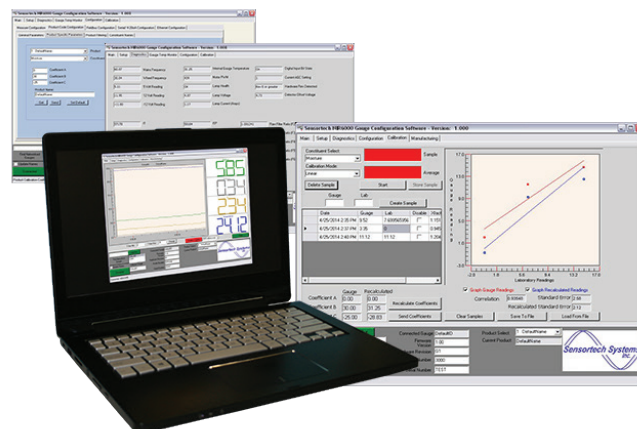
SAMPLING METHODS INCLUDE:

1. Continuous non-interrupted sampling.
2. Signal Gated Sampling uses an external gating input to start and stop sampling and holds the last measurement.
3. Auto Gated Sampling where the measured moisture level is used to start and stop the measurement using user defined moisture thresholds.
4. Timed Sampling may be used with Application Interfaces, such as a Snorkel Sampler, using fill and purge techniques of sampling.
5. Gate Timed Sampling uses an external gating input to start and stop sampling for a timed interval.
6. Auto Reference Sampling uses a measured value that is stored as a zero value offset.

Management Software

The NIR Series includes a proprietary PC based software package that offers an accelerated view of your production process from a desktop or laptop computer.

General measurement reading, data-logging, calibration utilities, and numerous configurations are among the many features included with your NIR Series proprietary software.



On-Line Moisture Measurement and Control System

Analyzer Specifications

Number of Measured Constituents	1, 2, or 3
Moisture Range & Accuracy	0 - 95% $\pm 0.01\%$ *
* All accuracies are subject to application	
Measurement Distance	4.0 - 16 in. (100 - 400 mm)
Optical Sampling Size	1.50 in. (38 mm)
6200 Series	0.40 in. (10 mm)
Number of Stored Calibrations	50
Standard Weight	16 lbs. (7 Kg) *

* Non-Standard enclosures are subject to application.

Enclosure

Standard	Cast Aluminum
6100 Series	Nickel Coated Cast Aluminum
6300 & 6500 Series	Stainless Steel
6400 & 6900 Series	Subject to application

Dimensions Refer to diagram on right

Power 80 / 260 VAC (50 / 60 Hz)

Option 24VDC

Temperature Control

Standard Operating Temperature 32 - 120°F (0 - 50°C)

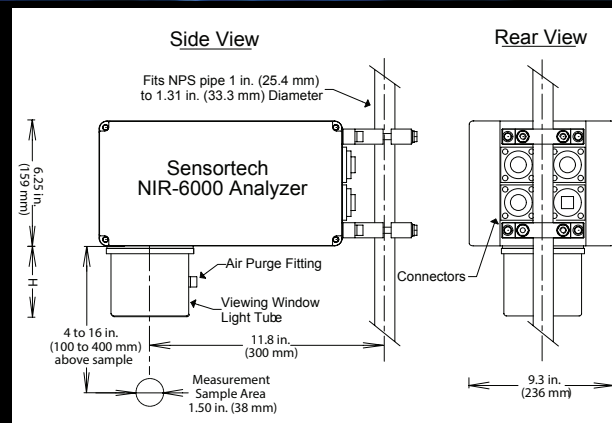
6300 Series 32 - 185°F (0 - 85°C)

- Several options are available spanning and exceeding the minimum and maximum stated specifications.
- Contact Sensortech for details.

Analyzer Inputs / Outputs	• Three self-powered isolated 4-20mA outputs
	• Ethernet TCP/IP, RS-232, RS-422/485
	• 1 Digital Input
	• 1 Digital Output

Communication Interface Options PROFIBUS, PROFINET, DeviceNet, EtherNet/IP, Modbus

Warranty 2 year system guarantee
Lamp and Motor (Lifetime)



Standard Features Include:

- 16-bit conversion and 32-bit processing
- Wavelength selection for each application
- Advanced digital filtering for noise free signal
- Surface mount technology
- Windows operating software
- Standard ethernet output
- 3 x 4-20mA outputs
- Optical window contamination monitor
- 2 year parts & labor warranty
- Factory Calibration included with your purchase

Options:

- Digital Display (DD)
- Touch Operator Interface (OI)
- Cooling Panels (Air or Liquid Cooled)
- Calibration Reference Standards
- Product Temperature Sensor
- PROFIBUS, PROFINET, EtherNet/IP, DeviceNet, Modbus
- KEL-F, Quartz, and Sapphire Viewing Windows
- Extended Warranty

Sensortech Guarantee

All products manufactured by Sensortech Systems, Inc. are warranted against defects in material and workmanship for a period of two years from date of shipment. In the event any product manufactured by Sensortech Systems, Inc. proves to be defective during the warranty period, it will be repaired free of charge.

For Additional Details Please Visit:
www.sensortech.com

© 2016 Sensortech Systems, Inc.

SENSORTECH SYSTEMS, INC. HEADQUARTERS

2221 E. Celsius Avenue, Unit B
Oxnard, California 93030
United States of America

Phone: (805) 981-3735
Fax: (805) 981-3738

sales@sensortech.com
www.sensortech.com

SENSORTECH SYSTEMS EUROPE BV

Distributiestraat 73
4283 JN GIESSEN
The Netherlands

Phone: +31(0) 183 445051
Fax: +31(0) 183 445059

info@sensortechsystems.eu
www.sensortechsystems.eu

SENSORTECH LTD. CHINA

Fu Ping Lu 299
24 Hao 2201 Shi
Shanghai 200333

Phone: +86 21 6609 0208
Fax: +86 21 6609 0209

info@sensortech.com.cn
www.sensortech.com.cn



The Measurement and Control Company