KPM

WE CRAFT ASSURANCE

Analytical Solutions for Industrial Process Control

KPM

WE CRAFT ASSURANCE.
For Our Partners, For Their Customers.

Founded in 2015 and comprised of nine strong product brands, KPM Analytics is a global leader in analytical instrumentation, inspection systems, and machinery, that enable companies to effectively manage product quality and brand value. Through long partnerships with global blue-chip companies in the industry, we focus on serving craftspeople in the food, agriculture, and environmental sectors, offering a comprehensive range of products and services to analyze critical parameters in their processes and solve their unique challenges. As a partner, we provide key metrics and intelligence to reduce waste and costs, increase energy efficiency, improve quality, and help companies protect their brands.

OUR PURPOSE

We provide premium quality assurance equipment for food producers, environmental researchers, industrial manufacturers, and others through expert craftsmanship and intimate knowledge of their business needs.
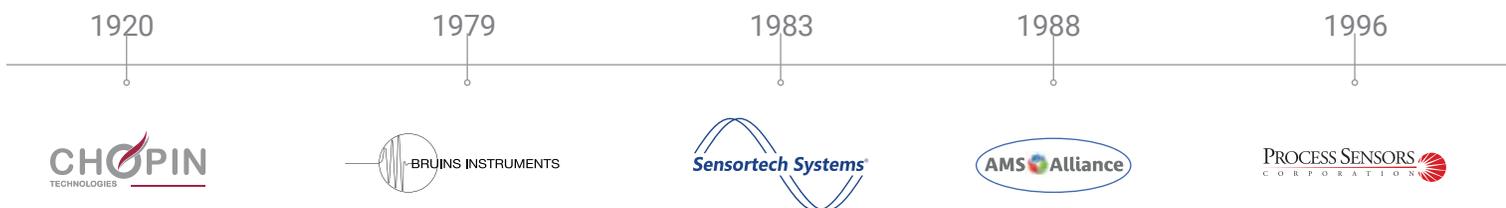
OUR VISION

Our partners all over the world will grow stronger from our driven, dedicated, and caring approach to solving their challenges, enabling KPM to become the global industry leader.

OUR MISSION

We provide the best solutions to help our partners control their product quality, scale capacity, and protect their brands.

NINE STRONG BRANDS SPANNING OVER 100 YEARS IN QUALITY ASSURANCE

1920	1979	1983	1988	1996

CHOPIN TECHNOLOGIES   BRUINS INSTRUMENTS   Sensortech Systems®   AMS Alliance   PROCESS SENSORS CORPORATION

Ruggedized Solutions for Challenging Industrial Environments

In many high-volume manufacturing operations, moisture, coat weight, and temperature variations directly influence product quality, prompt additional operational/energy costs, and ultimately cause waste if no parameter control measures are in place. However, not just any analyzer will do – industrial processing companies require this quality control in hostile operating conditions, such as in high-temperature conditions at the exit of a dryer, on an open conveyor with airborne particles, looking into a bin, chute, or auger, and elsewhere.

This is where KPM Analytics comes in with its line of online analyzers for industrial process control. From analyzing compositional parameters of incoming raw materials, managing product moisture before and after processing, and to improve spot-checking procedures, we partner with manufacturing industries of all kinds to solve their quality assurance demands, including:

Building Products

Bulk Chemicals and Powders

Bioenergy Products

Converting (Coatings, Plastics)

Wood Products

Mining and Minerals

Paper Products

Textile Products

1999   2001   2009   2012   2015

EyePro System   Unity Scientific   SIGHTLINE   SMARTVISIONWORKS   KPM

Analytical Solutions for Industrial Process Control
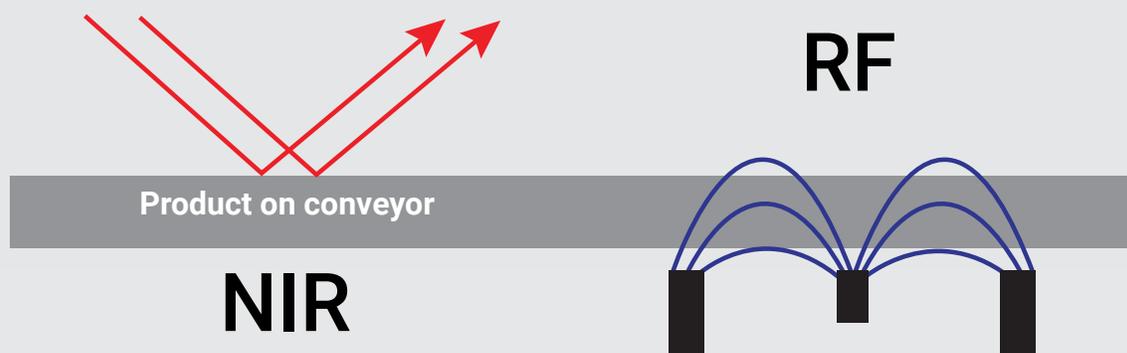
NIR or RF: Which Moisture Analyzer is Right for You?

Near-infrared (NIR) and radio frequency (RF) analyzers are two of the most commonly used online moisture analysis technologies for industrial processes – and KPM Analytics manufactures both. Choosing between NIR and RF moisture analyzers depends on specific requirements of the application, the product being measured, and the depth of measurement necessary.


|	NIR Technology	RF Technology
Operating Principle	Surface measurement; moisture content is measured by directing NIR light and analyzing the reflectance of light from the sample.	Penetrating measurement; a signal is passed through the product to measure moisture content.
Ideal Product Types	Better suited for homogeneous products with uniform moisture distribution.	Better suited for heterogeneous products with a specific product mass, uniform shape (e.g., board products), and density (under 101 mm (4 in.) of penetration depth).
Precision and Calibration	Highly precise (+/- 0.1% moisture, application specific). Requires calibrations for each type of material being measured. Must be installed at a within 200-450 mm (8-18 in.) of distance from product. Can also measure other parameters beyond moisture (resins/oil, coat weight, etc.).	Highly precise (+/- 0.05%, application specific) to acquire a full moisture profile of the product. Also requires calibration but less affected by variations in the surface properties of the material.

Measure Moisture Where it Matters

Below are two examples where KPM Analytics moisture analyzers are used to control moisture in common industrial processes.

KPM Solutions for Gypsum Board Manufacturing
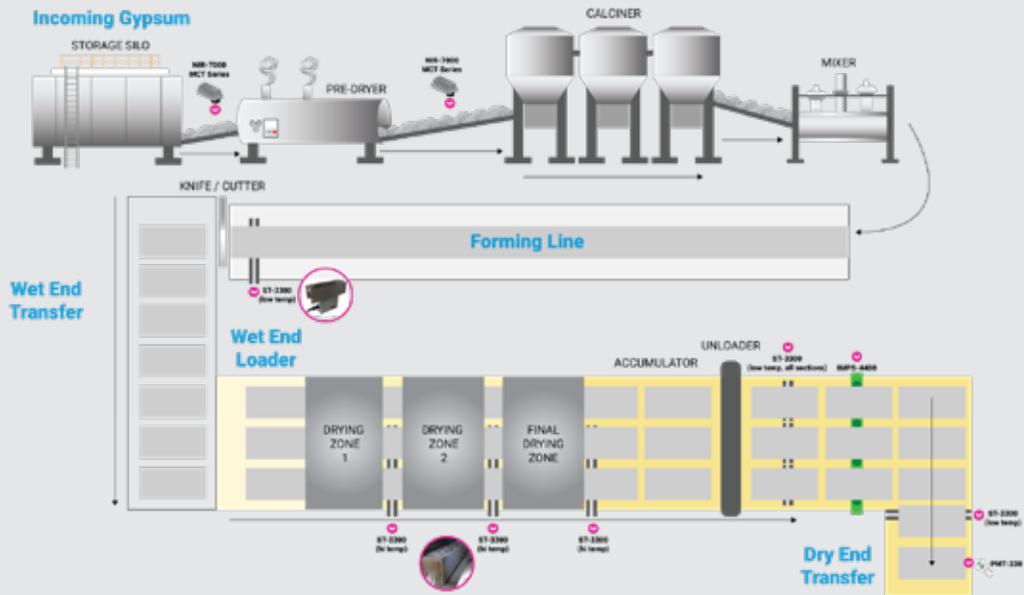
KPM Analytics Solutions for Wood Pellet Manufacturing

Analytical Solutions for Industrial Process Control
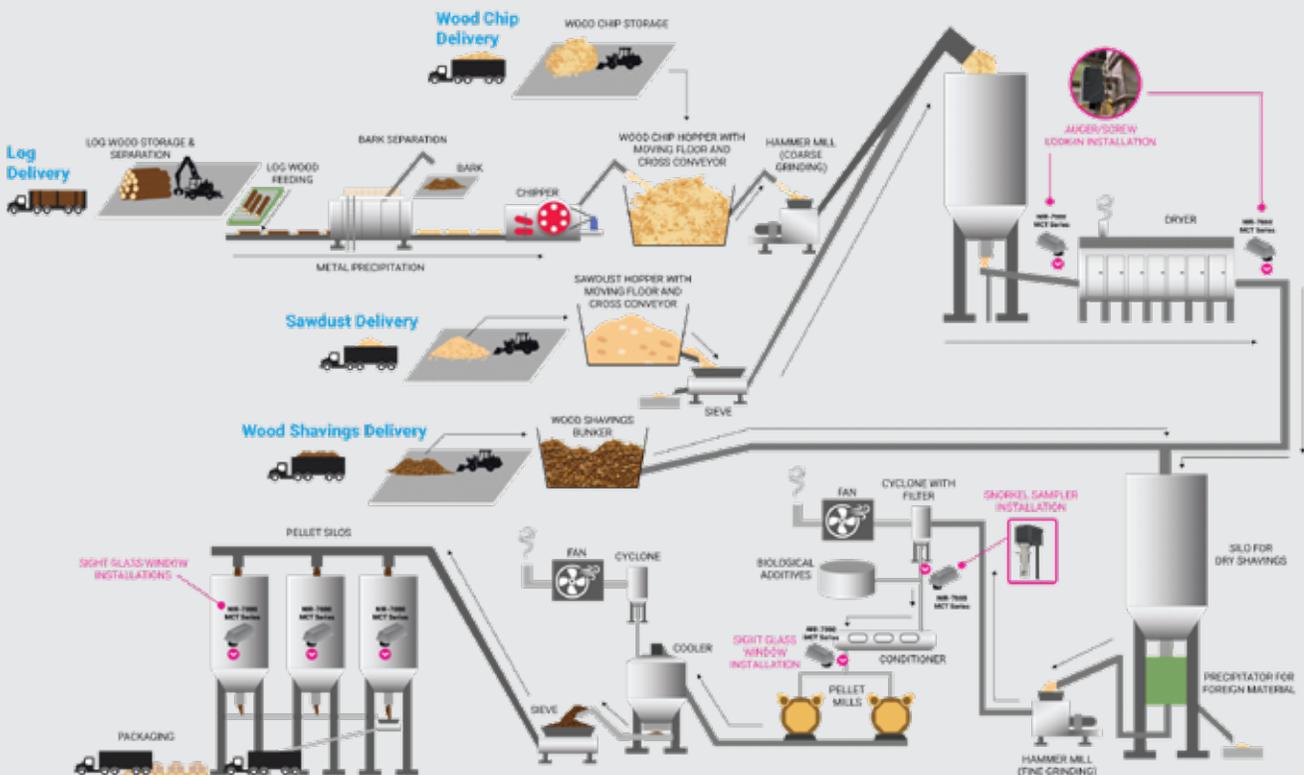
KPM Online NIR Analyzers

KPM's online NIR sensors provide rapid and continuous analysis for manufacturing operators to continuously monitor incoming raw materials or process control on the production line. With this analysis, operators can maintain consistent product quality, increase yield, and minimize waste.

MCT560

Our newest addition to the KPM line of online sensors, the MCT560 provides high-speed measurement capabilities (up to 99 readings per second).

- Multiple constituent online analysis (moisture, coat weight, temperature, and others).
- IP67-rated user interface for operating in challenging environments.
- Stores up to 200 product calibrations.
- More advanced user features (lamp life and motor life monitoring, vibration alarm).

MCT460

Predecessor to the MCT560 with equally high precision for analyzing multiple constituents (moisture, coat weight, temperature, and others).

- Measures up to 33 readings per second.
- IP67-rated user interface for operating in challenging environments.
- Stores up to 100 product calibrations.

NIR-7000

KPM's single constituent NIR analyzer that delivers reliable non-contact moisture measurements for high-throughput industrial applications.

- Moisture-only analyzer (within +/- 0.1% precision, application specific)
- IP65 rated housing
- Next generation analyzer to the popular Sensortech NIR-6000, offering modern analysis software, more accessories, and a lower cost of ownership

Guardian-HD Web Profiling Series

The Guardian-HD Web Profiling Series of rugged NIR sensors measure moisture, coat weight, adhesive thickness, and web temperature for all paper, film, and web-converting processes. Sensors mount to a traversing frame to provide non-contact, non-destructive on-line measurement across a full web width.


- Three options available to accommodate multiple product recipe codes, viewing displays, and multi-system monitoring capabilities.
- Each system customized to analyze full web width, along with the ability to position the sensor wherever it is needed (lane / move & park applications).
- Eliminates the need for time-consuming lab testing and adjustments.

# Sensor**Vu**™   Proprietary Software for KPM Online NIR Analyzers

SensorVu™ is a Windows®-based open-source software that allows operators to insert set-up parameters, perform or adjust calibrations, select product codes, examine internal diagnostic values, and remotely view moisture and temperature trends.

- Set up and organize products for quick and easy selection.
- Trend screen with logging capability displays process reading changes in real time.
- Simple, graphical calibration routine for quick setup of new products.
- Connect to multiple analyzers in a single location for multi-system monitoring.
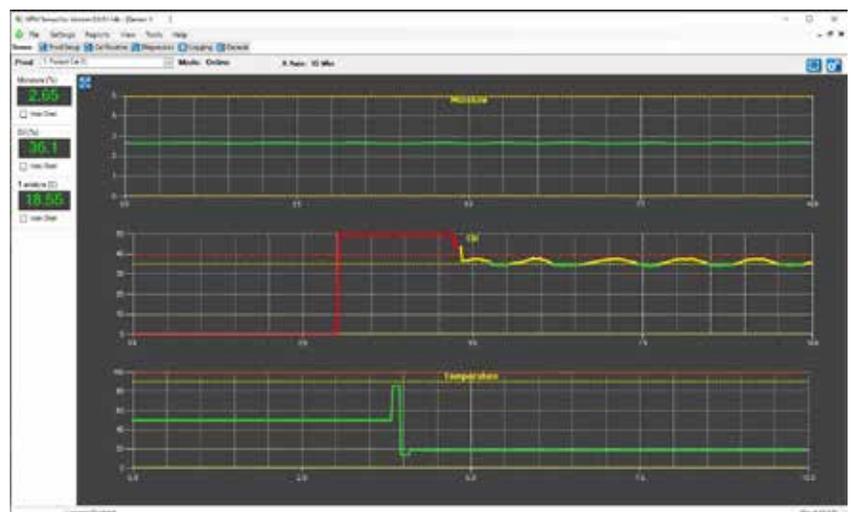
KPM Online RF Analyzers

For some manufacturing operations, even a slight variation in a product's moisture composition can cause significant quality control challenges. From gypsum processing, board manufacturing, and other industrial applications, many products have a tight moisture specification with little room for error. RF technology is ideally suited for these types of applications. These analyzers introduce radio waves that penetrate an object to collect its complete moisture reading across a full sample thickness.
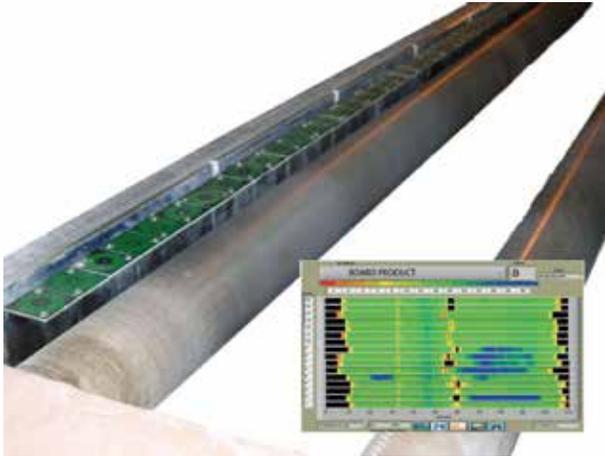
IMPS-4400

The Instant Moisture Profiling System (IMPS-4400) is a non-contact RF moisture profiling system for board manufacturers to improve and optimize production processes and meet quality standards, reduce energy costs, increase productivity, and generate revenue.

- Delivers the most advanced direct moisture profiling (accuracy range up to +/- 0.05%, application specific).
- Can integrate into process control systems through a digital I/O option.

ST-3300

Smart analyzer for process moisture measurement and control of materials used in wood products, building products, textiles, and paper industries.

- Designed to function virtually maintenance free in challenging conditions and temperatures up to 540°C (1000°F).
- Interfaces with your preferred HMI (PC, PLC, and optional 12" touch screen display)

PMT-330

Handheld RF moisture detection, allowing operators to spot-check moisture content of boards, wood, plastic, and paper products quickly and accurately.

- Low-cost, sophisticated at-line moisture solution.
- Completely wireless, rechargeable battery-operated unit.

Why is IR Temperature Measurement Important to Industrial Processing?

IR (Infrared) temperature measurement technology involves the use of devices, known as non-contact infrared thermometers or IR pyrometers, to measure the temperature of an object's surface from a distance without making physical contact. This technology is based on the principle that all objects emit infrared radiation at levels that vary depending on their temperature and material type. By detecting and measuring this infrared radiation, the temperature of the object can be determined.

IR temperature measurement capabilities offers several benefits to industrial processors, including:

- **Non-contact measurement:** Allows for product temperature to measured from a distance, ensuring safety and maintaining the integrity of the material.

- **Speed:** IR temperature measurement technology provides immediate temperature readings, which is crucial for many industrial production environments.

- **Non-destructive testing:** Since IR is non-contact, it does not alter or damage the material being measured.

- **Versatility and portability:** The flexibility of IR temperature sensors allows them to be used in a wide variety of applications and to be integrated into industrial control systems.

Through the Process Sensors Corporation product brand, KPM Analytics offers a wide range of online fixed IR temperature sensors and thermal imaging equipment for immediate and continuous temperature measurement and control in industrial processes, including:

- Steel
- Glass
- Induction heating

- Kilns
- Paper
- Ceramics

- Composites
- Building materials
- Aggregates, and more

KPM IR Temperature & Thermal Imaging Technologies (Available Only in the United States & Canada)

Temperature control is a main requirement for many industrial processes. When measuring temperature, the higher the moisture content of a product will lead a lower temperature, and vice versa. Monitoring and controlling temperature of a process is paramount to avoid over- or under-heating the material, thereby reducing waste, saving energy costs, improving yield, and increasing profits. Our IR temperature and thermal imaging products help industrial companies achieve these benefits.

IR Temperature Sensors

Online fixed pyrometers for continuous temperature measurement in industrial processes. Available with a variety of special features, accessories, and software options.

Thermal Imaging Camera Systems

Compact, radiometric, and enables the operator to view and measure thousands of temperature points, line profiles, or selectable regions of interest for temperature measurement and control.

Blackbody Calibration Sources

Emits a controlled and predictable source of IR radiance to calibrate pyrometers and thermal imaging systems accurately.

Portable IR Thermometers

Handheld, battery operated 1- and 2-color IR thermometers that offer the same accuracy and capabilities of fixed-mounted pyrometers.

Committed to Keeping Your Operation Seamless, from Start to Finish

At KPM Analytics, our focus is to provide your organization with end-to-end support through our highly skilled customer service teams and worldwide network of distributor partners. Each instrument and application are matched with specific support offerings to get the most out of your investment, including:

Field Service Commissioning & Training

- KPM's team of qualified service engineers offer professional guidance and expertise to ensure a seamless process.

Remote Commissioning

- For some instruments, remote commissioning provides a simpler, cost-effective method to ready your KPM technology for use.

Remote Support & Troubleshooting

- To minimize downtime, remote support from KPM is available to help companies quickly correct issues and save costs.

Annual Calibration & Preventive Maintenance

- KPM offers various annual services (in field & depot) to ensure equipment is running at factory standards.

Depot Repair at Global Service Centers

- For issues that cannot be addressed on-site or remotely, our worldwide Depot network is available to quickly inspect, repair, and return your equipment in a timely manner.

Training Collateral

- From "Best Practice" recommendations to quick startup and maintenance guides, KPM provides customers with the tools they need to succeed.

ON-DEMAND COURSES FOR KPM PRODUCT BRANDS

The KPM Academy is an online education platform that provides product training and maintenance support for our broad range of analysis solutions. Your KPM Academy license includes:

- Product training from the experts
- Staff training for new-hires or cross-training employees
- Refresher training
- Procedure updates, including preventive maintenance
- Courses on-demand

OUR GLOBAL SERVICE AND SUPPORT NETWORK

U.S.A.
- Boston, Massachusetts
- Orem, Utah

Canada
- Ottawa, Ontario

U.K.
- London

France
- Paris

Poland
- Warsaw

Germany
- Frankfurt

Italy
- Rome
- Trento

China
- Beijing
- Zhenzhou

Malaysia
- Kuala Lumpur

KPM HEADQUARTERS

● BRAND HEADQUARTERS / SALES OFFICE

● SALES & SUPPORT OFFICE

Working with KPM means you have a partner for the life of your equipment and beyond.
Let's discuss how we can help you solve production challenges and protect your brand value.

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