

# On-line NIR Smart Sensor



## MCT460

Continuous moisture and constituent measurement for quality control in manufacturing processes



## CONTINUOUS REAL-TIME MEASUREMENT AND CONTROL IN MANUFACTURING PROCESSES

Rapid, continuous product analysis is critical in all manufacturing processes to maintain consistent product quality, increase yield, maximize efficiency and minimize waste. The On-line Smart Sensor from Process Sensors Corporation (PSC) accurately measures moisture, oil, coat weight, temperature and additional constituents for quick return on investment.

Proven to perform in harsh conditions, the MCT460 On-line Smart Sensor is built to last, simple to install and virtually maintenance free for years of reliable, consistent results.

### IMPROVE CONSISTENCY

Control moisture to within one tenth of a percent to meet product specs every time

### MINIMIZE WASTE AND OVERHEAD

Enable closed loop control of dryers, belt speed, re-moisturizers and more for reduced waste

### EVALUATE RAW MATERIALS

Continuously monitor incoming raw materials for consistency and quality



### RAPID, CONTINUOUS MEASUREMENTS

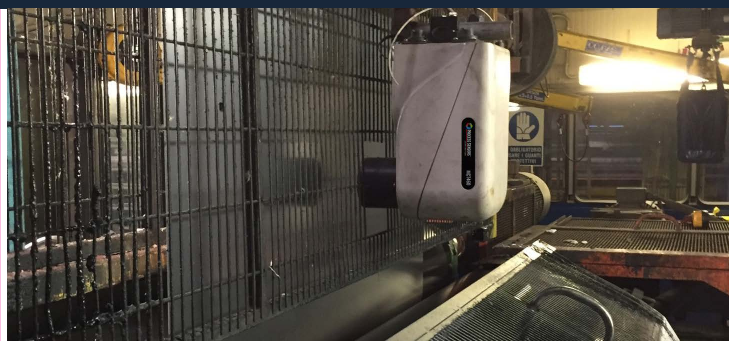
- Non-contact, continuous on-line measurement for rapid adjustments
- High accuracy and repeatability
- Unaffected by relative humidity, changes in product temperature, ambient light and high ambient temperatures

### MCT460 ADVANTAGE

- Simple to operate, integrate and standardize across multiple lines and locations
- Rugged cast aluminum enclosure withstands hot & dusty conditions
- Proprietary temperature controlled detector ensures measurement stability in arduous environments
- Fully modular with all components easily replaceable in the field
- Easy to troubleshoot with advanced on board diagnostics



# MCT460 Applications and Specifications



**MCT460 On-line NIR Smart Sensor provides reliable measurements for manufacturing processes:**

## Converting

- Pressure Sensitive Adhesives
- Paper
- Hot Melts
- Extruded Plastics
- PVB Films
- Textiles

## Chemicals, Minerals & Bulk Materials

- Crumb Rubber
- PVC Powders
- Ceramics
- Fertilizers
- Detergents
- Soaps
- Ore

## Biofuels

## Tobacco

## Wood

## SIMULTANEOUS CONSTITUENT MEASUREMENT

- Moisture
- Product Temperature
- Oil/Fats
- Coat Weight



**VIEWER SUITE SOFTWARE**

Proprietary ViewerSuite Windows® - based PC Software program 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.

## SPECIFICATIONS: MCT460 NIR SENSOR

Measurement NIR Constituents:	1, 2 or 3 simultaneously
<b>Accuracy: (subject to application)</b>	
Moisture	+/- 0.1%
Resins	+/- 0.2%
<b>Moisture Range:</b>	
Wet Basis	Min. 0.1% Max. 60%
Dry Basis	Min. 0.1% Max. 400%
Transmitter/Product Distance:	8-18 inches (200-450mm)
Calibration Codes:	100
Outputs:	4-20mA, 0-10V (isolated), RS-232 & RS485
Weight/Enclosure:	19 lbs. (8.6kg)/IP67, Cast Aluminum
Ambient Temperature:	0-50°C (32-120°F) with water or air cooling up to 80°C (160°F)
Optional Operator Interface:	5.7 inch Color Touchscreen LCD, 13 User Selectable Languages

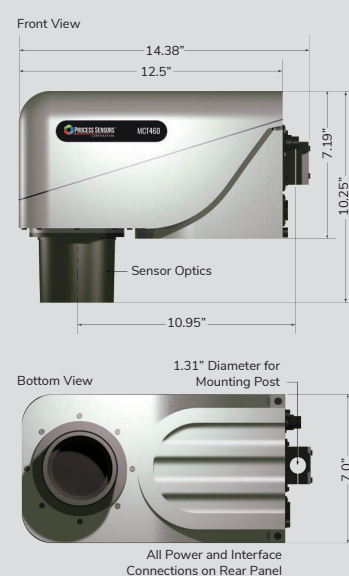
## SPECIFICATIONS: OPERATOR INTERFACE

Power:	From MCT460 Sensor or Local
Cable:	10 ft (3 meters) standard
Enclosure:	Cast Aluminum

## DATABUS & SOFTWARE INTERFACES

Optional Bus Interfaces	ProfiNet, ProfiBus, Ethernet IP, Modbus TCP, DeviceNet
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## MCT460 DIMENSIONS



## OPERATOR INTERFACE



## Request a Demo Today!

Call us at (508) 473-9901 or visit [www.ProcessSensors.com](http://www.ProcessSensors.com)

Our experienced team is eager to answer your application questions and demonstrate how our technology can solve the challenges you face every day.

# Featured Accessories for Manufacturing Processes



## IR Temp Sensor

Enables simultaneous product temperature measurement. No additional hardware or wiring is required.



## Fieldbus Module

Allows the sensor to communicate directly with control systems via Ethernet, Devicenet, Profibus, ect.



## Product Loss Sensor

Enables measurements when the product flow is discontinuous or there are frequent lulls in the production stream.



## Cal Check Standard

Used to verify sensor stability over time and transfer calibrations between sensors.

*For a complete list of accessories, visit our website.*



## THE PSC ADVANTAGE

Process Sensors Corporation, a KPM Analytics company, is a leading supplier of NIR and IR sensors and systems to Fortune 500 manufacturing companies and small, privately held organizations in industries worldwide.

With sales and application support offices around the world, Process Sensors Corporation's dedicated experts are committed to the long-term success of our customers from initial installation and training to on-site support and product enhancements. We pride ourselves on technical competence and customer satisfaction.

To speak with an NIR or IR expert about your application, visit our website or call us today.



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