Instantly analyze multiple product stream properties in-line.
Save money, time and materials.
Improve productivity, quality and brand value.

Product Specifications

Thermo Scientific ε scan

In-line process analyzer

Moisture Measurement Snack Food

Features & Benefits

- ε scan analyzer "sees through" the food matrix to instantly measure key properties such as moisture, fat and protein
- Easy to calibrate
- Accurate, real-time results
- Replaces constant offline lab testing
- Saves time, money and materials—you get immediate data to help you control your process
- Set alarms for unattended response
- Reduce waste and saves energy
- Protect brand value

Now you can "see what's inside the pipe" with Thermo Scientific ε scan analyzer. The next generation in process monitoring, ε scan analyzer uses Guided Microwave Spectrometry (GMS), a patented, no contact method to instantly measure bulk properties of a process down to a fraction of a percent—better measurements for better process control.

The ε scan™ analyzer delivers fast consistent measurements and generates usable data alarms eliminating the need for multiple laboratory samples—saving both time and valuable resources. With ε scan analyzer, you will know immediately if your content deviates from your target setpoints—without stopping the line, without costly lab testing, and without expensive delays.

Why ε scan Analyzer

- Analyzes multiple components
- Measurement is truly representative of the bulk of the product
- Results are not affected by product color
- No optical components that need maintenance or replacement
- Integrates seamlessly into your process—no flow obstruction
- Repeatability, accuracy, precision and stability
- High reliability with no moving parts
- Better measurement

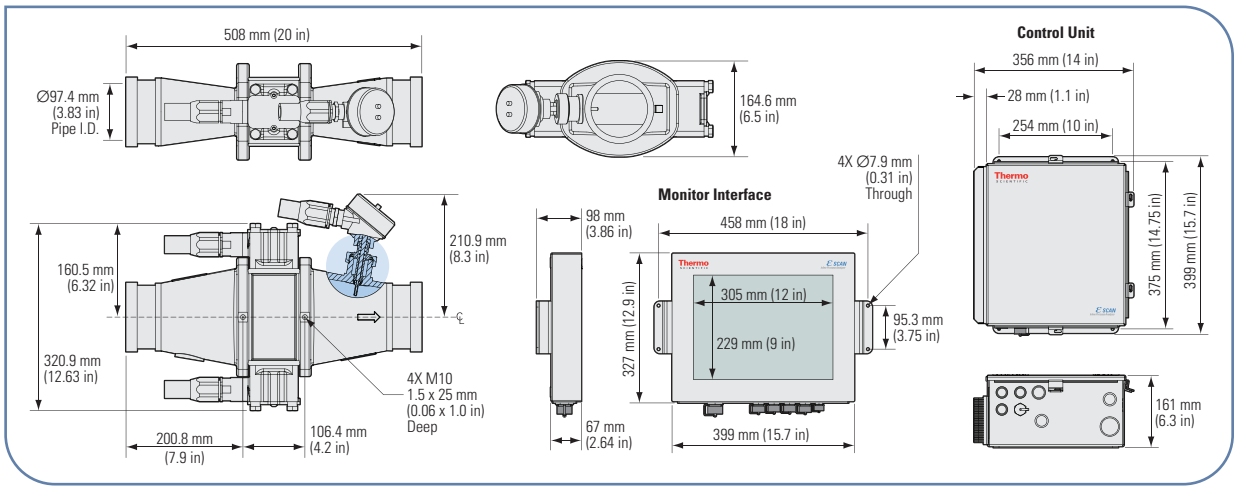
No matter what you produce—pumpable solids, liquids, slurries or powders—the cost of raw materials is rising every day, so monitoring and controlling your production processes is crucial to more efficient operations and better profitability.

The ℰ scan analyzer system includes the ℰ scan analyzer chamber, electronics control module and 15-inch touchscreen HMI for developing calibrations, configuring the analyzer and monitoring data.

Thermo Scientific ℰ scan

Technical Specifications	
Sample Types	Liquids; Granular solids; Pastes; Multiphase (pumpable solids, liquids, slurries)
Microwave Power	20 µW to 50 mW
Microwave Range	Approximately 30 MHz to 4 GHz
Temperature Compensation	Resistor Temperature Device RTD; Signal output for temperature via 4-20 mA outputs
Calibration	Software for calibration development, diagnostics and run-screen
Reference Standards	Use to verify the performance of the ℰ scan analyzer
Alarm Indicators	On display
Communications	Up to four, 4-20mA analog outputs; Remote Access; USB uploads/downloads
Process Connections	Tri-Clamp®; Bevel Seat Threaded; I-line; Custom connections available
Physical Specifications	
Product Chambers Available	101.6 mm (4 in); Special sizes; determined by application, available by special order
Product Chamber Material	316 SST
Process Temperature Limits	0°C to +150°C (+32°F to +302°F) up to 500 psi (3450 kpq) pressure
Electronics Enclosure Dimensions	399 mm (15.71 in) x 356 mm (14.03 in) x 161 mm (6.34 in)
Display Dimensions	325 mm (12.81 in) x 476 mm (18.74 in) x 98 mm (3.85 in)
Environmental Protection	Product-Chamber Probe: IP69k Electronics Enclosure and HMI Display: IP66
Electronics Module to Chamber Connection	3.66 m (12 ft) flex conduit interconnect Longer lengths available by special order
Ambient Operating Temperature Range	-5°C to +50°C (+23°F to +122°F)
Operating Relative Humidity	Control module: 0-95% condensing
Vibration Limits	Control module: Up to 1 m/s^2 from 5 Hz to 200 Hz
Weight	Approximately 59 kg (130 lb) depending on specific system configuration
Power Requirements	90-260 VAC (47-63 Hz), 2 power drops; Monitor Interface: 0.35A @ 120 VAC/0.2A @ 240 VAC; Control Unit: 0.25A @ 120 VAC/0.13A @ 240 VAC

Specification drawings



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