



SMART Q™
Quartz Halogen Moisture Analyzer





The fastest infrared moisture analyzer on the market.

The SMART Q is the most rugged and technologically advanced infrared moisture analyzer available. It is ideal for use both in the lab and at-line in manufacturing facilities.

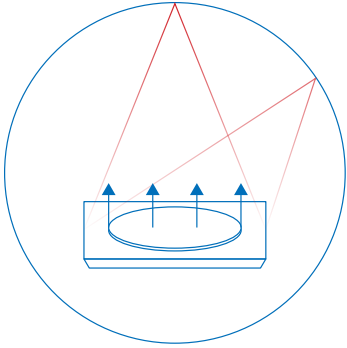
This unique technology allows for times now up to 3x faster than traditional IR (infrared) and halogen drying systems. Never before has a moisture analyzer been able to offer so much, with the fastest and most accurate infrared moisture analysis on the market.

Features

- Fastest infrared moisture analyzer on the market
- Ideal for dry products with up to 15% moisture content
- Rugged design withstands the toughest conditions
- Analytical 4-place balance with accurate 3-digit moisture readout
- Preprogrammed methods for many sample types
- No cavity preheat
- No sample cool down
- Ideal for at-line process control

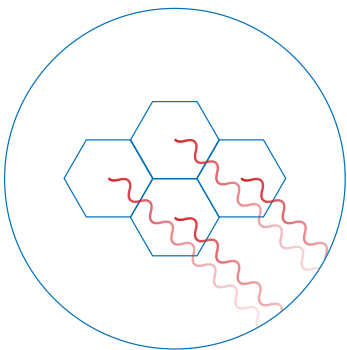


Over 11,000 moisture analyzers sold worldwide



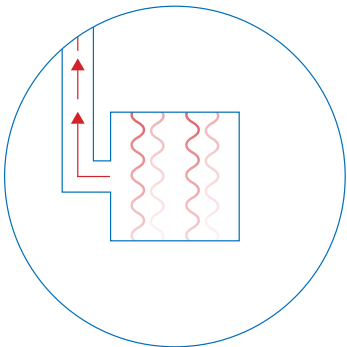
Direct Sample Temperature Measurement

The SMART Q utilizes an advanced IR sensor to measure the temperature of the entire sample. Competitor systems only measure the cavity temperature, and not the sample. Direct sample measurement allows for better control and improved accuracy and precision.



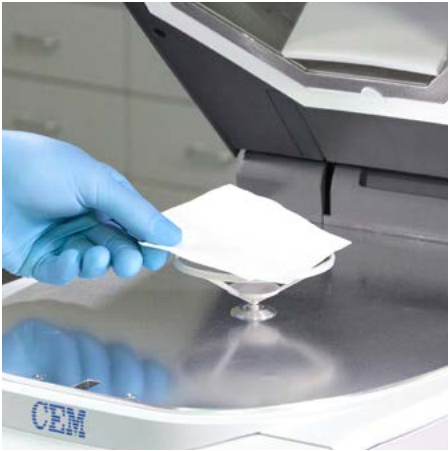
Collimated Energy

Stray infrared irradiation can negatively impact sample temperature readings with the use of infrared temperature sensors. The SMART Q has a unique honeycomb lattice providing collimated infrared irradiation for sample heating, thereby avoiding stray light. This provides highly accurate temperature control.



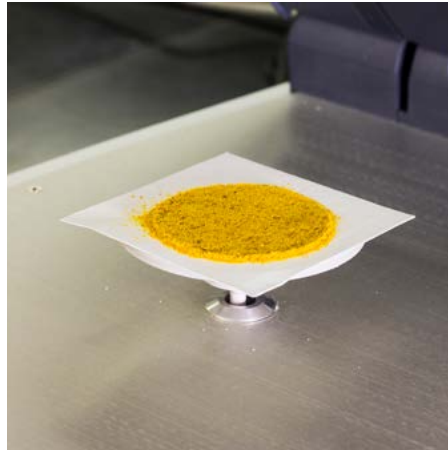
Active Ventilation

The SMART Q incorporates active cavity ventilation, directing all fumes through an exhaust port. Safely and easily route exhaust out of the lab without the need for dedicated space in a fume hood.



1

Tare Pads.



2

Add Sample.



3

Press *Start*.

Simple Work-flow



Individual User Logins
Password protected and CFR 21 Part 11 compliant.



Built-In Training Videos
Ensure your technicians run the SMART Q correctly.



Method Import
Import from other users or CEM's method library from anywhere in the world.



Data Export
For easy data storage, transfer, and review.



Dairy Powders



Processed Foods



Pharmaceutical Products



Plastics



Preinstalled Method Library

A simple touch is all it takes. Leave method development behind with SMART Q One Touch Technology®. Test virtually any low moisture sample with a library of ready-to-use methods at your fingertips.

Application support, when you need it.

The applications team at CEM has developed a library of method notes to guide you in programming methods. View them at cem.com/methods. If no method note exists for your application, contact us at process.support@cem.com and we will be happy to develop one for you.



System Comparison

NOTE: For even faster test times, CEM offers the SMART 6™, which combines infrared + microwave energy to analyze a wider range of products. The SMART 6 is ideal for high-moisture applications and any application where speed and performance are critical.



SMART Q™



SMART 6™

Removal Species	Free + Bound Moisture Polar + Non-Polar	Free + Bound Moisture Polar + Non-Polar
Moisture/Solids Range	0.01 to 15.00%, 0.001 % resolution	0.01 to 99.99%, 0.01% resolution (optional 0.001%)
Energy Source	Quartz Halogen Infrared	Quartz Halogen Infrared + Microwave
Data Analysis	Advanced Statistical Processing	Advanced Statistical Processing
Exhaust	15,600 RPM (adjustable with speed control)	15,600 RPM (adjustable with speed control)
Footprint	<ul style="list-style-type: none"> • 13.0 (W) x 23.0 (D) in (299 in²) • 33.0 (W) x 58.5 (D) cm (1931 cm²) 	<ul style="list-style-type: none"> • 13.0 (W) x 23.0 (D) in (299 in²) • 33.0 (W) x 58.5 (D) cm (1931 cm²)
Weight	38 lbs (17 kg)	62 lbs (28 kg)



We Simplify Science

cem.com



Over 50,000 systems sold worldwide



CEM has been an ISO-certified facility since 1994



All systems serviced & supported by experts with an average of 15 years of experience



CEM invests 12% of annual revenue into R&D, the result... 11 R&D 100 awards



IQ/OQ/PQ Validation by certified CEM Technicians

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