

## Moisture Analyzers



# IR-30 Moisture Analyzer

Fast, accurate and affordable moisture determination.

**The IR-30 utilizes infrared heating and precision weighing for quick and accurate moisture determination. It measures moisture or solids content in a range of samples from powders to liquids.**

**Easy to operate.** Plant floor operation is quick and easy to learn. The simple control panel allows for error-free operation.

**Durable and compact.** This instrument is designed to withstand the rigors of everyday production use. Its compact size allows it to go anywhere.

**Fast and accurate.** The combination of an internal balance and an infrared dryer provides reproducible results in, typically, 5 to 15 minutes. Percent moisture and percent solids are calculated to 0.01% resolution.

**Results are easy to obtain.** At the touch of a button the weight of the sample dish is eliminated. Add the sample while the fill bar indicates the optimal sample weight. Lower the hood and the test begins automatically. Results are shown clearly on the screen along with test parameters. Add an optional printer for hard copy documentation.

**Simple endpoint determination.** For most samples, choose the automatic shutoff parameter. Over the length of the test, the instrument detects the moisture loss of the sample. As the change in weight approaches zero the analyzer shuts itself off. The timer mode can be activated for samples that do not lose a significant amount of moisture over time.



## Features:

- Compact size (8.5" W x 11.1" L x 6.5" H)
- Readability to 0.01%
- Precision balance with 0.001g resolution automatically weighs sample
- Results displayed in % moisture, % solid, % moisture/dry, % solid/dry or change of weight
- Serial port to send information to a computer or printer (optional)
- Metal shield inserts to comply with food and beverage industry requirements (optional)

# IR-200 Moisture Analyzer

Moisture workhorse perfect for the production floor or R&D laboratory.

**The IR-200 blends ease of use, precision measurement, and advanced features to create a solution for most every moisture application.**

**Diverse Applications.** With a working range of 0.1 to 99.9% moisture the IR-200 can test nearly any type of sample. Programmable one- or two-step drying procedure allows rapid drying of the sample without scorching. Store up to 99 custom programs, each with their own alphanumeric identification for easy recall.

**Comprehensive Documentation.** A built-in printer provides data on every test. The custom print menu allows you to select information for each printout to meet ISO/GLP requirements. Choose to add an individual header, show initial and final weights, display the program number and parameter, select current operator and add sample identification. The IR-200 also allows you to store up to 250 test results that can be printed or downloaded to a computer. Statistical evaluation can be performed on stored data.

**Simple, yet sophisticated.** When it's time to run a test, just press the test key. The IR-200 automatically tares the balance and sample pan, and prompts the operator to add the sample. Close the hood and the instrument captures your sample weight and begins the test automatically. When the analysis is complete the result is printed along with the time and date.

**Superior analytical performance.** The precision balance mechanics are isolated for reliable weighing under elevated temperature conditions. The quartz heating elements can be routinely calibrated with a temperature calibration kit. Plus the IR-200 features a universal, self-adjusting power supply to regulate electrical line surges common to plant operation.

## Features:

- Moisture determination from 0.1 to 99.9%
- Programmable one- or two-step drying procedure
- Up to 99 custom programs
- Built-in thermal printer
- Store up to 250 test results
- Menu-driven software for simple setup of drying programs
- Choose from eight display units including % moisture, % solids, % volatiles and mg/L
- Automatic weight capture for simple, reliable operation
- Security feature to prevent unauthorized changes





Model	IR-200	IR-30
Working Range	0.1 - 99.9%	0.2 - 99.8%
Measurement Method	Infrared radiation, loss on drying	Infrared radiation, loss on drying
Heat Source	Four parallel quartz infrared heaters	Dark infrared heaters
Temperature Setting	30° - 210°C in one degree increments	40° - 160°C in five degree increments
Temperature Control	Platinum temperature sensor ±1°C with two-point calibration	Temperature sensor, +/- 5°C
Temperature Steps	Programmable; one or two steps	One
End of Analysis Mode	Time-out (2 x 99 min max), or custom automatic slope off	Time-out (99 min max), or automatic slope
Units of Results	% moisture, % solid, % volatiles, % moisture dry, mg/L, ppm solid, ppm moisture, weight loss	% moisture, % solid, % moisture dry, % solid dry, weight loss
Readability of Results	0.01%	0.01%
Balance Capability	100 grams	30g
Balance Readability	1mg (0.001g)	1mg (0.001g)
Program Storage	99 programs with alphanumeric names	Current program
Data Storage	255 last results with statistical evaluation	Current result
Display	Back-lit liquid crystal display, 30 characters by 8 lines	Liquid crystal display
Integrated Printer	Thermal, 40-character graphical	None (optional external printer)
External I/O	Two serial bidirectional RS-232C	Serial unidirectional RS-232C
Power Requirements	90 to 250 VAC, 50/60 Hz (self adjusting)	115 or 230 VAC, (selectable) 50/60 Hz
External Dimensions (L x W x H)	16.9" x 14.8" x 6.1" (429 x 376 x 155mm)	11.3" x 8.6" x 6.5" (287 x 218 x 165mm)
Net Weight	21 lbs. (9.5 kg)	12.1 lbs. (5.5kg)



### Put us to the test!

Send us your samples and our Applications Laboratory will develop an optimized drying procedure specific to your materials and send you the results.

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