

## Moisture Analyzers



# IR-60 Moisture Analyzer

## Big features in a small footprint

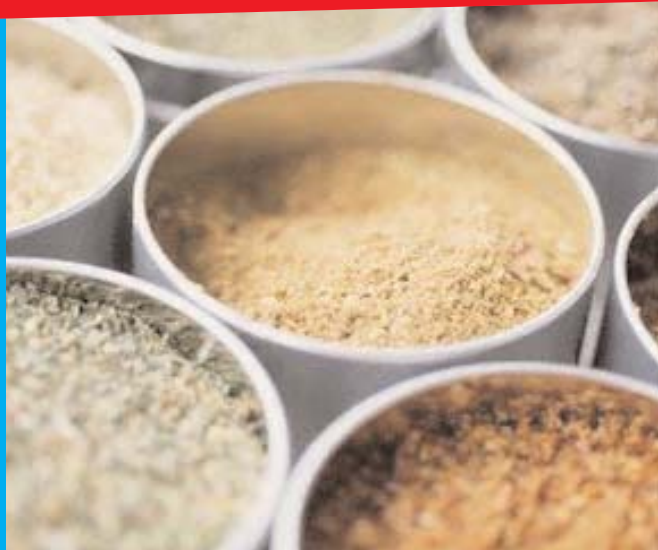
**Rapid heating technology and easy set-up are combined in a rugged, straightforward instrument. The perfect solution for routine analysis of up to 5 unique samples!**

**New heating technology.** For over a decade Denver Instrument has provided superior infrared moisture analysis with quartz heating elements. The IR-60 utilizes a new quartz design. The coil configuration allows rapid heating, similar to halogen, while assuring even heating of the sample.

**Flexible endpoint determination.** For general applications, choose the factory-defined automatic endpoint or timer mode. Or tailor the endpoint specifically for your samples to get better repeatability or shorter analysis time.

**Setup made simple.** Store up to 5 programs for analysis of different sample types. Standby temperature keeps the instrument ready for the next test and reduces analysis time. Password protection blocks unauthorized changes.

**Select a program and go!** Place an empty pan on the instrument and press the Enter key. Add sample, close the hood and the testing will begin automatically. Display shows test parameters, current temperature, elapsed test time and current sample value.



### Features:

- Efficient use of space, only 12.6"L x 8.4"W x 7.1"H
- Quartz coil infrared heating element
- Single-block weighing technology with 0.001g resolution for precise results
- Readability of 0.01%
- Store up to 5 programs
- Factory-defined or semi-adjustable endpoint criteria
- RS232 serial port to send information to computer or optional printer

# IR-120 Moisture Analyzer

## Advanced features for advanced applications

**Suitable for a broad range of samples, from 0.1 to 99.9% moisture. Store up to 100 different methods with easy recall and the ability to print out or send to a database for long-term recordkeeping.**

**Applications Galore.** With a working range of 0.1 to 99.9% moisture, the IR-120 is appropriate for nearly any type of sample. Programmable one, two or three-step drying procedure allows rapid drying of the sample without scorching. Store up to 100 custom programs, each with their own alphanumeric identification for easy recall.

**Comprehensive Documentation.** A built-in printer provides data on every test. For each program, customize the printout with your pertinent information or set to meet ISO/GLP requirements. Add a unique header, print initial and final weights, display the program number and parameters, plus include sample identification. Statistical analysis can be performed on up to 250 test results.

**Great Choice for Multiple Users.** Simply press the TEST key and the instrument will prompt the user through the analysis. Three features help with the uniformity of sample analysis. The target weight allows easy weigh-in of the sample and assures the correct sample size. Select the requirements for the test to start, including a time delay to be sure the instrument is ready for each test. User ID tracks which operator performed the test while the printout provides a space for a signature.

**Advanced Heating Element.** The IR-120 features the new coil quartz infrared heating element. It is specially designed to provide the consistent heating you've come to expect from Denver Instrument, while producing even faster analysis times. The heating element is housed in a motorized heating hood that can be opened at a keypress or set to close automatically before a test. The hood retracts into the body of the moisture analyzer providing direct, overhead access to the weighing pan for easy sample entry.



### Features:

- Quartz coil infrared heating element
- Single-block weighing technology with 0.001g resolution for precise results
- Readability of 0.01%
- Store up to 100 custom programs
- Programmable one, two or three-step drying procedure
- Fully adjustable endpoint criteria to maximize efficiency and accuracy
- Motorized heating hood for full access to sample
- Store up to 250 test results
- Built-in dot-matrix printer and RS232 port
- Security feature to prevent unauthorized changes





Model	IR-60	IR-120
Working Range	0.1 - 99.9%	0.1 - 99.9%
Measurement Method	Infrared radiation, loss on drying	Infrared radiation, loss on drying
Heat Source	Quartz coil infrared heater	Quartz coil infrared heater
Temperature Setting	40° - 210°C in one degree increments	30° - 210°C in one degree increments
Temperature Control	Temperature sensor, +/- 5°C	Temperature sensor, +/- 5°C
Temperature Steps	One	Programmable; one, two or three
End of Analysis Mode	Time-out, automatic slope or semi-adjustable slope	Time-out, automatic slope or fully adjustable slope
Units of Results	% moisture, % solid, % moisture dry, mg weight loss or grams of residue	% moisture, % solid, % moisture dry, mg weight loss, grams of residue, g/kg or g/L
Readability of Results	0.01%	0.01%
Balance Capability	60 grams	120 grams
Balance Readability	1mg (0.001g)	1mg (0.001g)
Program Storage	5 programs	100 programs
Data Storage	Current result	Statistics on 250 points
Display	Back-lit liquid crystal display	Back-lit liquid crystal display
Integrated Printer	None (optional external printer)	Dot matrix
External I/O	Serial unidirectional RS-232C	Serial unidirectional RS-232C
Power Requirements	115 or 230 VAC, 50/60 Hz	115 or 230 VAC, 50/60 Hz
External Dimensions	12.6 x 8.4 x 7.1" (L x W x H) (320 x 213 x 181 mm)	18.0 x 13.8 x 6.0" (L x W x H) (457 x 351 x 152 mm)
Net Weight	12.1 lbs (5.5 kg)	18 lbs (8 kg)



### Put us to the test!

Send us your samples and our Applications Laboratory will develop an optimized drying procedure specific to your materials. We will then send you the results for comparison with your current method.



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