

IR-60/IR-120 Moisture Analyzers



Advanced
Features for
Advanced
Applications



AINSWORTH

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IR-60/IR-120 Moisture Analyzers

Big features in a
small footprint

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.

Setup made simple!

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

Specifications

Working range	0.1-99.9%
Measuring method	infrared radiation, loss on drying
Heat Source	Quartz coil infrared heater
Temperature Setting	40° - 210°C in one degree increments
Temperature Control	Temperature sensor, +/- 5°C
Temperature Steps	One
End of Analysis Mode	Time-out, automatic slope or semi-adjustable slope
Units of Results	% moisture, % solid, % moisture dry, mg weight loss or grams of residue
Readability of Results	0.01%
Balance Capability	60 grams
Balance Readability	1mg (0.001g)
Program Storage	5 programs
Data Storage	Current result
Display	Back-lit liquid crystal display
Integrated Printer	None (optional external printer)
External I/O	Serial unidirectional RS-232C
Power Requirements	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)
Net Weight	12.1 lbs (5.5 kg)

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Advanced features
for advanced
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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%
- Internal balance calibration
- 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
- Factory-defined or semi-adjustable endpoint criteria
- RS232 serial port to send information to computer or optional printer



Specifications

Working range	0.1-99.9%
Measuring method	infrared radiation, loss on drying
Heat Source	Quartz coil infrared heater
Temperature Setting	30° - 210°C in one degree increments
Temperature Control	Temperature sensor, +/- 5°C
Temperature Steps	Programmable; one, two or three
End of Analysis Mode	Time-out, automatic slope or semi-adjustable slope
Units of Results	% moisture, % solid, % moisture dry, mg weight loss or grams of residue, g/kg
Readability of Results	0.01%
Balance Capability	120 grams
Balance Readability	1mg (0.001g)
Program Storage	100 programs
Data Storage	Statistics on 9,999 points
Display	Back-lit liquid crystal display
Integrated Printer	Dot matrix
External I/O	Serial unidirectional RS-232C
Power Requirements	115 or 230 VAC, 50/60 Hz
External Dimensions	18.0 x 13.8 x 6.0" (L x W x H) (457 x 351 x 152 mm)

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Accessories

IR-120 Accessories

Printer Paper

Printer paper for the internal printer of the IR-120 Moisture Analyzer (1 roll/pkg.) **901044.1**

In-Use Cover

Durable, high-impact plastic cover to protect your analyzer during use. **902572.1**

Serial Cable

RS-232 to 9 Pin **102043.1**



IR-60 Accessories

GLP Printer with Cable **301380.1**

Dot Matrix Printer w/Cable **902574.1**

Printer Paper (GLP & Dot Matrix Printers) **901044.1**

Serial Cable

RS-232 to 9 Pin **102043.1**

In-Use Cover

Durable, high-impact plastic cover to protect your analyzer during use. **902571.1**



Common Accessories

Disposable Pans

Disposable 4" diameter aluminum pans for use with the IR-60 and IR-120 Moisture Analyzers (50/pkg.) **900274.1**

Glass Sample Pads

Disposable 4" diameter glass pads for use with the IR-60 and IR-120 Moisture Analyzers (200/pkg.) **900298.1**



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