

Don't get burned

Be Sense-ible.™



Test & Measurement Instruments
To Keep You Running

Temperature | Humidity | Airflow | Light

Now available from

 **Cole-Parmer®**
Delivering Solutions You Trust

800-323-4340

ColeParmer.com/Digi-Sense

**All NEW
meters
inside!**

Why Choose Digi-Sense™ Instruments?

- **Accurate**

Precision meters deliver the best accuracies

- **Reliable**

Precalibrated by InnoCal® to NIST-traceable standards—reliable results guaranteed

- **Durable**

Built to last—rugged design withstands your most demanding applications

- **Recommended**

by your test & measurement experts for more than 60 years



Now available from

 **Cole-Parmer**
Delivering Solutions You Trust

Call: **800-323-4340**

Fax: **847-247-2929**

E-mail: **sales@coleparmer.com**

Web: **ColeParmer.com/Digi-Sense**

Go to www.coleparmer.com/terms for a full list of terms and conditions. For full information on returns, go to www.coleparmer.com/returns.

©2014 Cole-Parmer Instrument Company. All rights reserved. Printed in the United States of America. For a listing of Cole-Parmer owned trademarks, go to ColeParmer.com/trademarks. All other trademarks, servicemarks, tradenames, or other logos of third parties are and remain the property of such third parties.

Don't get burned!

Catch equipment failures before they happen

Infrared Thermometers

- **Maintain your safety**—take measurements from a safe distance without contacting sample area
- Surface temperature readings in a snap—as quick as 300 ms
- Continuous scanning of your target with **trigger lock**
- **Advanced features** at an entry-level price—all units feature Min/Max and Hold functions, single targeting laser, and large backlit LCD
- Adjustable emissivity and user-adjustable temperature alarm with indicator light on models 20250-05 and 20250-06
- Have confidence in your readings—**precalibrated** before you get it!



| Model | 20250-04 | 20250-05 | 20250-06 |
|-------------------------------|----------------------------------|--|--|
| Distance-to-sight (D/S) ratio | 10:1 | 12:1 | 20:1 |
| Temperature range | -4 to 630°F (-20 to 332°C) | -31 to 1000°F (-35 to 537°C) | -31 to 1472°F (-35 to 800°C) |
| Accuracy | ±2.5 of rdg or ±4.5°F (2.5°C) | ±4.5°F (2.5°C) from -58 to 68°F (-35 to 20°C); ±1.0% ±1 of rdg from 68 to 572°F (20 to 300°C); ±1.5% ±1 of rdg from 572 to 1000°F (300 to 537°C) | ±4.5°F (2.5°C) from -58 to 68°F (-35 to 20°C); ±1.0% ±1 of rdg from 68 to 572°F (20 to 300°C); ±1.5% ±1 of rdg from 572 to 1472°F (300 to 800°C) |
| Emissivity | 0.95 fixed | 0.10 to 1.0 adjustable | |

AM-20250-04
IR thermometer, 10:1

AM-20250-05
IR thermometer, 12:1

AM-20250-06
IR thermometer, 20:1

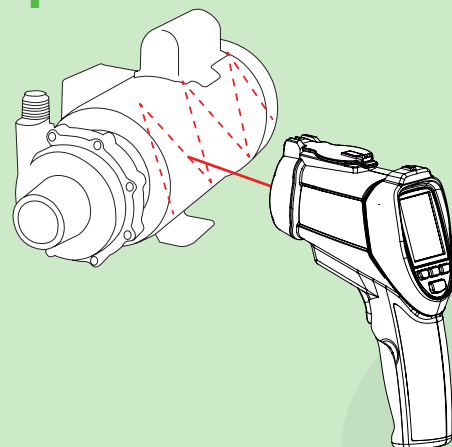
IR Measurement Tips

To locate a hot spot: First aim outside the area of interest, then scan across the area with an up-and-down motion until you locate the hot spot.

Measure surface temperature only: IR thermometers can't measure internal temperatures.

Don't take measurements through glass: Glass has very distinctive reflection and transmission properties that do not allow an accurate IR temperature reading. IR thermometers are not recommended for use in measuring shiny or polished metal surfaces (stainless steel, aluminum, etc.).

Watch environmental conditions: Steam, dust, smoke, etc., can prevent accurate measurements by obstructing the unit's optics.



Professional Series Infrared Thermometers

Dual targeting lasers for accurate measurements up to 4 feet away!

- High distance-to-sight ratios provide more accurate measurements from a distance
- Take contact measurements as well with external type K input
- Review data with included software—USB makes for easy data transmission
- Feature Min/Max/Avg and Hold readings, temperature differential, high/low alarms, adjustable emissivity, trigger lock, and USB interface

• Model 20250-07

Temperature range: -58 to 3002°F (-50 to 1650°C)

Distance-to-sight ratio: 30:1

Data logging: no

• Model 20250-08

Temperature range: -58 to 3362°F (-50 to 1850°C)

Distance-to-sight ratio: 50:1

Data logging: yes

AM-20250-07
IR thermometer, 30:1

AM-20250-08
IR thermometer, 50:1,
with data logging



Infrared Stick Thermometer

IP54 rated for dust and water resistance

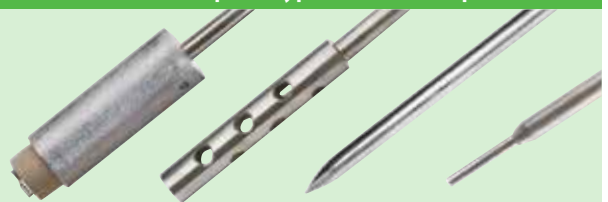
- One-button operation for quick and easy measurements
- Have confidence in your readings—precalibrated before you get it!
- Temperature range: 0 to 500°F (-18 to 260°C)
- Accuracy: ±2%
- Distance-to-sight ratio: 8:1

Easy one-button operation



AM-20250-09
IR stick thermometer, 8:1

Some of Our Most Popular Type K Thermocouple Probes



AM-08516-60
Surface probe

AM-08516-75
Air/gas probe

AM-08516-65
Penetration probe

AM-08516-55
General-purpose probe

Find more at ColeParmer.com/Probes

Thermocouple Thermometers

Versatile units adapt as your needs change—
from lab to field

- No need to worry about thermocouple probe errors—**electronic offset function** compensates for errors
- Maintain visibility of major events with **time stamp**
- Accept K and J thermocouple probes with miniconnector for **added versatility**
- Provide Min/Max/Avg, Hold, and °F/°C/K **selectable units**
- **Temperature range**
 Type K: -328 to 2501°F (-200 to 1372°C)
 Type J: -346 to 2012°F (-210 to 1100°C)

AM-20250-01
Single-channel
thermometer

AM-20250-02
Dual-channel thermometer
with data logging

AM-20250-03
Four-channel thermometer
with data logging

See page 4 for Type K Thermocouple Probes



20250-03

20250-01

Precalibrated!

Each meter includes a data-rich,
ISO 17025 compliant certificate.



20250-20

Professional Series Thermocouple Thermometers

Measure safely from a distance with optional IR wand

Same great features of thermocouple units above, plus:

- Measure **temperature differential** readings easily and accurately
- Accept type K thermocouples with miniconnector for readings from -328 to 2501°F (-200 to 1372°C) with **±0.5% accuracy**

AM-20250-18
Single-channel
thermometer

AM-20250-17
Dual-channel
thermometer

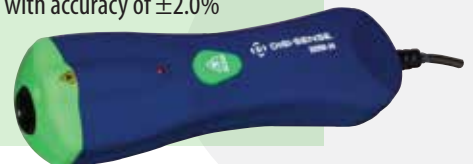
AM-20250-19
Dual-channel thermometer
with data logging and USB port

AM-20250-20
Four-channel thermometer
with data logging and USB port

Optional IR Wand

- 8:1 distance-to-sight ratio and range of -31 to 1022°F (-35 to 550°C) allows you to **measure surface temperature from a distance** with accuracy of **±2.0%**

AM-20250-24
Optional infrared wand



General-Purpose Thermohygrometers

One-handed operation for easy measurements

- Displays humidity, dew point, wet bulb, and temperature readings with $\pm 2\%$ RH measurement accuracy
- Have confidence in your readings—**precalibrated** before you get it!
- Unique side button controls allows for **one-handed operation**
- Additional features on 20250-12 include external thermocouple, dry bulb measurement, and TSH and TEET calculations for **more accurate balancing** of airflow systems

AM-20250-11
Thermohygrometer

AM-20250-12
Thermohygrometer
with thermocouple

See page 4 for Type K Thermocouple Probes



20250-11



20250-12

Side buttons for
easy, one-handed
operation



Backlit display
for easier
reading

Professional Thermohygrometer

One meter—all the readings you need

- Measures temperature and humidity, then **calculates absolute humidity, dew point, and wet bulb** for you
- Instrument that stands up to your demands—**rugged construction** for longer life
- Have confidence in your readings—**precalibrated** before you get it!
- Added features include Min/Max and Hold functions for **easier capture and review** of data

AM-20250-21
Professional thermohygrometer

Rugged, comfortable design
meets your demands



Don't blow it!

Keep heating and cooling systems running smoothly

Pressure and Flow Meter

- Ready to use when you get it—includes pitot tube and two rubber hoses
- Count on your readings—accurate to $\pm 0.3\%$ of the full scale
- Easily recall previous readings—stores up to 99 readings per parameter with time reference
- Measures differential and static pressure, while also calculating air velocity and airflow
- More in-depth data analysis with included software right on your desktop
- Have confidence in your readings—precalibrated before you get it!

AM-20250-13

Pressure and flow meter

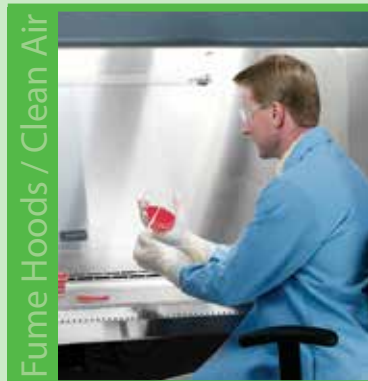
Large display shows multiple parameters including the sample number saved in memory



Precise airflow measurements ensure safer conditions



HVAC



Fume Hoods / Clean Air



Working Conditions

Compact Vane Anemometer

Pocket-sized readings in selectable units

- No conversion calculations required—select from ft/min, m/s, mph, km/h, or knots
- Precise airflow measurements from 80 to 5900 ft/min with accuracy of $\pm 3\%$
- Read display easily anytime—backlight turns on automatically in low light

AM-20250-23
Compact vane anemometer

Small size fits in your pocket



Data Logging Anemometer

Long-term monitoring with mounting stand

- Easily analyze and graph data with USB interface
- High and low level alarms with LED indicator
- Precise measurements up to 3937 ft/min with accuracy of $\pm 3\%$
- Select unit of measure—ft/min, m/s, mph, km/h, or knots

AM-20250-22
Data logging anemometer

Built-in USB for easy downloads



Buy precalibrated now,
Save on recalibration with InnoCal®!

CFM/CMM Vane Thermoanemometer

No need to change views—read two measurements simultaneously

- Two memory locations store commonly used vent sizes to save you time
- Make conversions a thing of the past—user-selectable units include ft/min, m/s, mph, km/h, knots, CFM, and CMM
- Dual-line display for reading air velocity or airflow, and air temperature simultaneously
- Measure air velocity up to 5900 ft/min with $\pm 3\%$ accuracy; airflow up to 999,900 CFM/CMM
- Sampling rate of approximately 1 reading/second

AM-20250-14
CFM/CMM vane thermoanemometer



Side buttons let you operate unit with one hand while holding probe with the other



Professional CFM/CMM Vane Thermoanemometer

Save time—store up to 16 vent sizes for easy recall

- Meet environmental requirements more effectively with accuracy of $\pm 3\%$ accuracy
- User-selectable units include ft/min, m/s, mph, km/h, knots, CFM, and CMM
- Dual-line display for reading air velocity or airflow, and air temperature simultaneously
- Measure air velocity up to 5900 ft/min and airflow up to 999,900 CFM/CMM
- Sampling rate of approximately 1 reading/second
- Keep instrument safe with included hard carrying case

AM-20250-15
Professional CFM/CMM vane thermoanemometer

Selectable units—
no more conversions

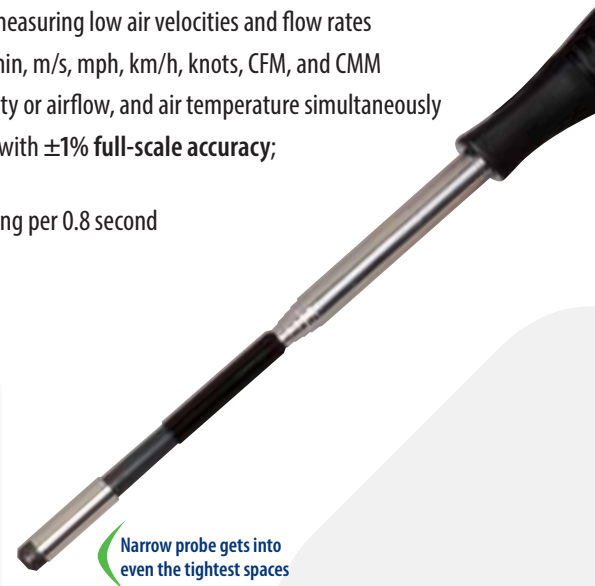


CFM/CMM Hot-Wire Thermoanemometer

Get airflow readings even in narrow spaces

- High-precision readings even when measuring low air velocities and flow rates
- Measure in your desired units—ft/min, m/s, mph, km/h, knots, CFM, and CMM
- Dual-line display for reading air velocity or airflow, and air temperature simultaneously
- Measure air velocity up to 4925 ft/min with $\pm 1\%$ full-scale accuracy; airflow up to 99,999 CFM/CMM
- Sampling rate of approximately 1 reading per 0.8 second

AM-20250-16
CFM/CMM hot-wire thermoanemometer



Narrow probe gets into
even the tightest spaces

Don't get blinded! Stay in code and ensure safer environmental conditions

Data Logging Light Meter

- Perfect for most applications—measures from 0 to 400 klux
- Count on your readings—accurate to $\pm 3\%$ with silicon photo diode and spectral response filter
- Record and analyze your data for future recall—stores up to 87,000 measurements
- More in-depth data analysis with included software right on your desktop
- Have confidence in your readings—precalibrated before you get it!
- Measure in either lux or footcandles

Time stamp for
data logging
measurements

AM-20250-00
Data logging light meter



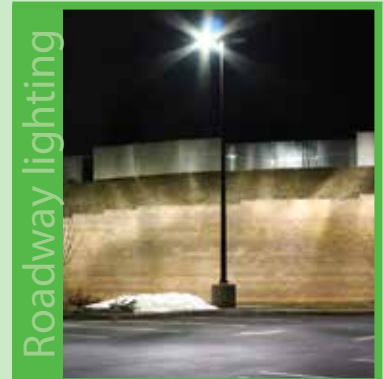
Use it wherever lighting is critical



Interior light levels



Outdoor lighting



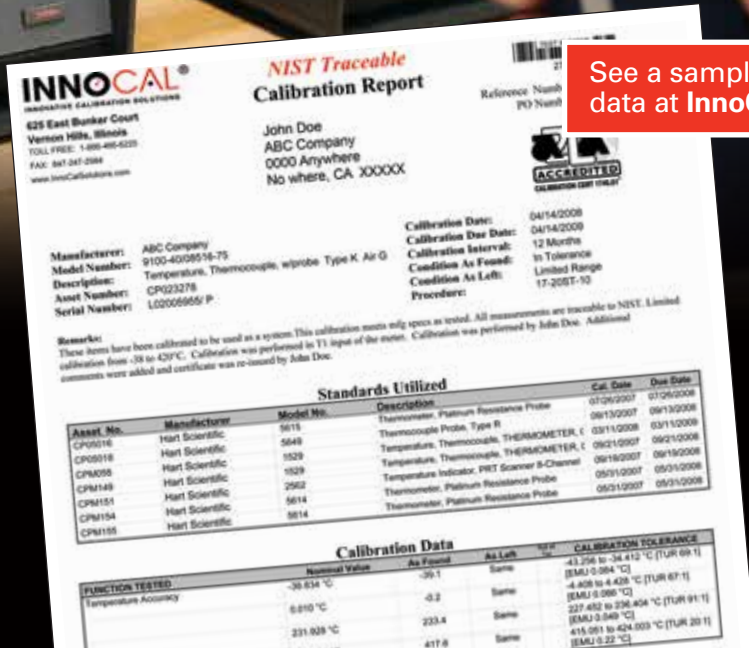
Roadway lighting



Precalibration by InnoCal

Each Digi-Sense™ meter shown in this catalog is precalibrated to:

- ✓ Ensure accuracy to NIST-traceable standards by an A2LA-accredited metrology lab
- ✓ Arrive with a data-rich calibration certificate that is ISO 17025 compliant—*at no additional charge*
- ✓ Meet stringent quality requirements



Calibration Traceable to NIST Standards

InnoCal's A2LA-accredited metrology laboratory has assisted thousands of customers meet ISO, USDA, EPA, GLPs/cGMPs, and other quality standards including FDA compliance. Highly trained and experienced metrologists use some of the most advanced methods and standards available.



Conformity*

ANSI/ISO/IEC 17025:2005 accredited
NIST Handbook 150, 2000 Edition
ANSI/NCSL Z540-2-1997
NIST Technical Note 1297 ISO 9000:2000

*Please check our scope of accreditation for any limitations.

Precalibration Recalibration On-Site

Contact us for more information!

866-INNOCAL (866-466-6225) InnoCalSolutions.com
info@InnoCalSolutions.com



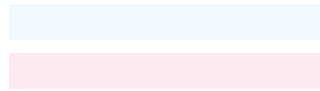
625 East Bunker Court
Vernon Hills, IL 60061-1844

Phone: 800-323-4340

Fax: 847-247-2929

E-mail: info@coleparmer.com

www.coleparmer.com



3792-CP



Trust Your Measurements—

Precalibrated for reliable results



NEW meters inside
to make sure you don't break down