



Mini series



Hand-held Measuring & Testing Instruments

GAS ANALYSIS

- Thermometer
- Data Logger
- Manometer
- Light Meter
- Anemometer
- Hygro-Thermometer
- Sound Level Meter
- Tachometer
- pH/mV Meter
- Multimeter





Thermometer Hygro-Thermometer

Mini LTK Thermometer

Type K thermometer
Range from -50°C to 1300°C
Accuracy $\pm(0.3\% \text{ rdg} + 1^\circ\text{C})$
Resolution 0.1°C/1°C
Data-Hold and auto power off functions
Complete with wire type K thermocouple

Mini LTK thermocouple thermometer offers all of the convenience and accuracy of higher end thermocouple thermometers in one easy-to-use economically priced instrument. Popular features include Maximum reading memory, Hold function, °F/°C switchability, low battery indicator and auto power off to save battery life. Plug the probe in, turn the unit on and make your measurements. Thermometer accepts all type K thermocouple probes with yellow ANSI mini-connector.

Specifications

- °C / °F switchable,
- Range: from -50 to +1300°C ,
- Resolution: 0.1°C (up to 199.9); 1°C elsewhere,
- Accuracy: $\pm(0.3\% \text{ rdg} + 1^\circ\text{C})$,
- Display: LCD,
- Power: 9 V battery,
- Protective ABS case, battery and type K test thermocouple included. ABS housing.

Temperature probes

- F2135100** Immersion type K
- F2132100** Air type K
- F2137100** Contact type K
- F2133100** Insertion type K
- F2139100** Velcro type K



Mini IR Infrared Thermometer

Pocket size non-contact thermometer
Range from -20°C to 320°C
Laser Beam
Pre-set emissivity for simple setup

The Mini IR is a pocket sized and light weight infrared thermometer which offers easy and accurate non-contact temperature measurement of the range -20~320°C. The Mini IR series employs infrared non-contact measurement principles which is generally considered to be the most ideal and efficient thermometry technology, especially where contact thermometry is impractical.

Wide ranges of applications include: Heating and Air conditioning, Asphalt, Fire inspectors, Food and automotive industry, etc.

Specifications

- Range: from -20 to +320°C ,
- Resolution: 1°C,
- Accuracy: $\pm 3\% \text{ rdg}$ or $\pm 2^\circ\text{C}$ whichever is greater,
- Spectral response: 6-14 μm ,
- Response time: 500ms,
- Distance/Spot ratio: 5:1 (10cm @ 0.5m),
- Built-in laser beam,
- Display: LCD,
- Power: 9V battery



Mini T+RH Hygro-Thermometer (445580)

Read temp / RH simultaneously
Capacitance polymer sensor
Hold / Min / Max features
Auto power off
Easy self calibration

The Mini T+RH is a hygro-thermometer easy to use, and easy to carry. It is suitable for general use and heating, conditioning applications.

Specifications

Relative Humidity

- Range: from 5 to 95% RH
- Accuracy: $\pm 5\% \text{ RH @ } 25^\circ\text{C}$
- Resolution: 0.1% RH

Temperature

- Range: from -10 to 45 °C
- Accuracy: $\pm 1^\circ\text{C}$
- Resolution: 0.1°C





Anemometer Datalogger

MiniLog T

DataLogger (8818)

Temperature datalogger
Thermistor temp. sensor
Rugged, waterproof housing
Programmable sample interval from 1s to 2h
Optional interface module and Windows™ software

Specifications

- Range: from -40 to 85°C
- Accuracy: $\pm 0.6^{\circ}\text{C}$ (from -20 to 50°C) / $\pm 1.2^{\circ}\text{C}$ elsewhere
- Resolution: $0.1^{\circ}\text{C} < 50^{\circ}\text{C}$; $0.2^{\circ}\text{C} < 70^{\circ}\text{C}$; 0.3°C elsewhere
- Sample data: up to 8000



MiniLog T+RH

DataLogger (8829)

Temperature and relative humidity datalogger

LCD screen for displaying data
Rugged, waterproof housing
Programmable sample interval from 1s to 2h
Optional interface module and Windows™ software

Specifications

- Temperature**
- Range: from -40 to 85°C
 - Accuracy: $\pm 0.6^{\circ}\text{C}$ (from -20 to 50°C) / $\pm 1.2^{\circ}\text{C}$ elsewhere
 - Resolution: $0.1^{\circ}\text{C} < 50^{\circ}\text{C}$; $0.2^{\circ}\text{C} < 70^{\circ}\text{C}$; 0.3°C elsewhere

Relative Humidity

- Range: from 0 to 100% RH
- Accuracy: $\pm 3\%$ RH
- Sample data: up to 16000

Mini AIR PRO

Air flow meter

Remote vane with built-in temperature
Wind speed units selectable range from 0.4m/s to 25m/s
Accuracy $\pm 2\%$ rdg
72mm wheel
Data-Hold plus auto shut off

The Mini AIR PRO measure airflow and temperature simultaneously. Remote probe is designed with twisted vane arms and low friction ball bearings for accurate airflow readings in low or high velocities. Microprocessor-based unit provides fast, reliable air velocity measurement in five different scales. Mini AIR PRO features selectable °F or °C, Record/Recall minimum, maximum, and average readings, display hold, and automatic shut-off to preserve battery. Wide range application includes: airflow measurements in heating, ventilation, and air conditioning systems, air duct analysis, wind tunnel studies, or monitoring or process air

Specifications

- Air velocity**
- Range: da 0.4 a 25 m/s
 - Accuracy: $\pm 2\%$ rdg
 - Resolution: 0.1 m/s
- Temperature**
- Range: da 0 a 60°C
 - Accuracy: $\pm 0.8^{\circ}\text{C}$
 - Resolution: 0.1°C
- Power: 9V battery



Mini AIR PRO HW

'Hot Wire' air flow meter

Hot wire thermo anemometer
Wind speed units selectable range from 0.2m/s to 20m/s
Accuracy $\pm 3\%$ rdg
940mm x 13mm telescoping probe
Data-Hold plus auto shut off

The Mini AIR PRO HW accurately measure air speed and temperature in ducts and ventilating systems.



Mini AIR

Air flow meter (45118)

Dual display of air velocity and temperature or windchill

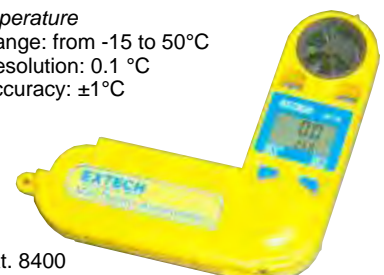
Auto shutoff, Data Hold
Selectable engineering units
Water resistant housing floats

Specifications

- Air velocity**
- Range: from 0 to 98 mph
 - Resolution: 0.1 mph
 - Units: knots, km/h, mph, Ft/min, m/s, Beaufort force.
 - Wheel: 24mm

Temperature

- Range: from -15 to 50°C
- Resolution: 0.1°C
- Accuracy: $\pm 1^{\circ}\text{C}$



Multimeter

Mini MMX

Pocket multimeter (38109)

- 4000 count high contrast LCD display with bargraph**
- Auto power off**
- Built-in storage compartment for integrated test leads**
- AC/DC voltage up to 400V**
- DC current up to 400mA**
- Resistance up to 40M**
- Diode test, Logic test, battery check and continuity beeper**
- Basic accuracy Vdc $\pm 1.5\%$ rdg**



Cat. 8740

VOLT/METAL DETECTOR

Model 401665

LED status indicator and audible confirmation

Metal detector functions: locate metal conduit, piping, nails/screw, and trace wirings in walls

Non-contact voltage detector: check sockets, fuses, light bulbs/lamps, and verify polarity

Electrical tester: locate LIVE wires, check AC power, verify DC voltage and polarity, check appliance grounds.



Cat. 8750

Mini MMX Pro

Professional Multimeter (Mt320)

- 4000 count LCD display**
- Auto power off**
- Measurements functions include AC/DC Voltage and Current, Resistance, Frequency, Duty Cycle, Capacitance, Temperature, Diode and Continuity**
- Basic DCV accuracy $\pm 0.3\%$ of rdg**

The Mini MMX PRO is an autoranging digital multimeter. It has a unique display prompts indicate correct test probe connections, blown fuses, and to disconnect power for passive functions.

	Ranges
DC Volt	400mV, 4V, 40V, 400V, 1000V
AC Volt	400mV, 4V, 40V, 700V
AC/DC Current	400 μ A, 4000 μ A, 40mA, 400mA 20A
Resistance ()	400, 4k, 40k, 400k, 4M, 40M
Capacitance	40nF, 400nF, 4 μ F, 40 μ F, 100 μ F
Frequency (Hz)	500m, 5, 50, 500, 5k, 50k, 500k, 5M, 10M
Temperature	da -20 a 1370°C con Tck

Temperature probes

- F2135100** Immersion type K
- F2132100** Air type K
- F2137100** Contact type K
- F2133100** Insertion type K
- F2139100** Velcro type K



Cat. 8710

Mini MMX AMP

600A AC/DC Clamp + DMM (38387)

- Maximum AC current of 600A**
- Measure AC current, AC/DC Voltage and Resistance**
- Basic AC current accuracy of 1.5% rdg**
- Auto power off and Data Hold functions**
- 33mm circular jaw opening for large cables**

The Mini MMX AMP is a compact, rugged, accurate, 600A clamp-on ammeter.

Specifications

- AC Current**
- Range: 600 A
 - Resolution: 0.1A
 - Accuracy: $\pm(1.5\%rdg+4d)$

- DC Voltage**
- Range: 600 V
 - Resolution: 1 V
 - Accuracy: $\pm(1\%rdg+1d)$

- AC Voltage**
- Range: 600 V
 - Resolution: 1 V
 - Accuracy: $\pm(1.5\%rdg+4d)$

- Resistance**
- Range: 2000
 - Resolution: 1
 - Accuracy: $\pm(1\%rdg+2d)$



Cat. 8720

Specifications may change without notice.



Manometer Tachometer pH-meter

Mini LP

130mbar differential manometer

Measure gauge and differential pressure

Pressure range from 0 to 138mbar

Accuracy $\pm 0.3\%$ FS

Selectable engineering units

Data-Hold, Max, Min functions

Auto power off

The Mini LP is a gauge and differential pressure meter for a wide range of applications. The internal pressure sensor is compatible with all non-corrosive, non-explosive gas.

The applications include: medical equipment, pneumatic controls, HVAC industries.

Specifications

- Range: from 0 to 138 mbar
- Resolution: 0.1 mbar
- Accuracy: $\pm 0.3\%$ FS
- Display: backlit LCD
- Power: 9V battery
- Complete with carrying case, connection hose, and instructions.

Small conversion table

1psi x 6.8947 = kPa
 1psi x 68.947 = mbar
 1psi x 70.038 = cmH₂O
 1psi x 51.715 = mmHg

Mini Speed

Tachometer (461895)

Non-contact motion and RPM meter

Compact, rugged and accurate

5 digit LCD display

Accuracy $\pm 0.05\%$ rdg

The Mini Speed is a professional combination contact / photo tachometer.

Specifications

Contact

- Range: from 0.5 to 20000 RPM
- Accuracy: $\pm(0.05\% \text{ rdg} + 1 \text{ d})$
- Sampling time: 1 sec >60RPM
- Resolution: 0.1RPM / 1RPM
- Surface speed: from 0.05 to 1999.9 m/min

Photo

- Range: from 5 to 99999 RPM
- Accuracy: $\pm(0.05\% \text{ rdg} + 1 \text{ d})$
- Sampling time: 1 sec >60RPM
- Resolution: 0.1RPM / 1RPM
- Power: n.4 type AA batteries
- Complete with wheels for linear surface speed, reflective tape, carrying case and instructions

Mini pH PRO

pH / mV / Temperature

Ranges 0-14pH / 0-100°C / 0-1999mV

Data-Hold with Auto power off

Easy Slope and Calibration adjustments

Manual and auto temperature compensation using temperature probe

2 calibration point: pH4 and pH7

General purpose pH electrode included

The Mini pH PRO is a mV and pH meter for field and laboratory applications.

Specifications

pH

- Range: from 0 to 14pH
- Resolution: 0.01 pH
- Accuracy: $\pm(0.03 + 2d)$

Temperature

- Range: from 0 to 65°C
- Resolution: 0.1°C
- Accuracy: $\pm 1^\circ\text{C} < 50^\circ\text{C} / \pm 4^\circ\text{C}$ elsewhere

mV

- Range: from 0 to 1999mV
- Resolution: 1 mV
- Accuracy: $\pm(0.5\% + 1d)$

- Power: 9V battery
- Complete with pH electrode and instructions



Sound level meter Light meter

Mini Sound Pro

Sound level meter (407750)

Large LCD display with backlighting and analog bargraph

Range from 30 to 130 dB

Meets ANSI and IEC651 Type 2 standards

A and C selectable frequency weightings

Fast and Slow selectable response time

Tripode mount

The Mini Sound PRO is a professional digital sound level meter for general purpose and high accuracy Type 2 measurements.

The *electret condenser* microphone (with background noise absorber) provides 1.5 dB accuracy.

The Mini Sound PRO is hand held, rugged, and can be mounted on tripod for professional and long term measurements.

Specifications

- Range (A weighting): from 30 to 130dB
- Range (C weighting): from 35 to 130dB
- Resolution: 0,1 dB
- Accuracy: ± 1.5 dB (Type 2)
- Display : Large 3 ½ digit display with backlighting and analog 50dB bargraph
- AC analog output: 0.707 RMD (F.S.)
- DC analog output: 10 mV/dB
- Power: 9 V battery
- Complete with case, background noise absorber and instructions .



Cat. 8810

Mini Sound

Sound level meter (407727)

Large LCD display with backlighting and analog bargraph

Range from 40 to 130 dB

A and C selectable frequency weightings

Fast and Slow selectable response time

Accuracy ± 2 dB @ 94dB, 1000Hz

AC analog output: 0.707Vrms



Cat. 8840

Mini Lux

Light meter (401027)

Two ranges 200.0 e 2000 Fc

Accuracy $\pm 5\%$ rdg

Resolution 0.1 and 1 Fc

Cat. 8440



Mini Lux Pro

Light meter (403125)

Remote light sensor on 1.5m cable

Wide ranges for measurements to 20000 Fc/Lux

mV analog output

Built-in CIE Spectrum curve

Peak-Hold and Data-Hold

The Mini Lux Pro is a portable light meter with remote light sensor on 1.5 meters cable conveniently. Mini Lux Pro is rugged, easy to use, fast (2.5 rdg/sec) and accurate ($\pm 3\%$ rdg).

The built-in CIE Spectrum Curves simulates "human eye" response for optimum light analysis.

Specifications

- Range: from 0 to 20.000 Lux
- Resolution: 0.01 Lux
- Spectral response: CIE photopic curve
- Cosine correction: $< 2\%$; 150° acceptance angle
- Accuracy: $\pm(3\% \text{ rdg} + 10 \text{ digit})$
- Sample rate: 2.5 rdg/sec
- Display: 3 ½ digit LCD
- Power: 4 type AAA batteries
- Complete with soft vinyl case, light sensor cover and instructions



Cat. 8410