

ENVIRONMENTAL TESTERS



FEATURES

- ▶ Compact and lightweight
- ▶ Simple-to-use
- ▶ Hand-held or wall mountable
- ▶ Data logging (model dependent)
- ▶ User programmable (model dependent)
- ▶ Multi line backlit display (model dependent)
- ▶ USB and Bluetooth communication (model dependent)
- ▶ Analysis/Report generating software included (model dependent)
- ▶ Battery or USB powered (model dependent)

LIGHT • SOUND • HUMIDITY • MOISTURE • CO₂ GAS • TEMPERATURE • IR TEMPERATURE

Our products are backed by over 100 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.

Technical Hotline: (800) 343-1391
www.aemc.com

 **AEMC**[®]
INSTRUMENTS
CHAUVIN ARNOUX GROUP

MODEL 1110

LIGHTMETER



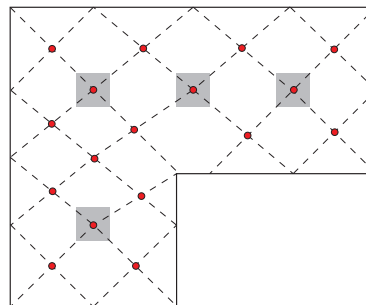
Measure lighting at any time

FEATURES

- ▶ User selectable light source, natural, LED or fluorescent
- ▶ Spectral error compensation for LED and fluorescent lighting
- ▶ Removable light sensor with expandable cord up to 48"
- ▶ Map mode profiles the illuminance map of the area or room by storing multiple measurements
- ▶ Min, Max, and Average measurements stored
- ▶ Hold function freezes the display
- ▶ Spot or continuous recording of up to 1,000,000 measurements stored in 8MB flash memory
- ▶ Blue luminescent backlit display
- ▶ User selectable Foot Candle or Lux units
- ▶ USB and Bluetooth communication
- ▶ Magnetic mount
- ▶ Battery or USB powered
- ▶ DataView® graphing and analysis software included

Product 2121.71 Includes

- Soft carrying case
- 3 x 1.5 V AA alkaline batteries
- 6ft USB cable, type A to type B USB
- Quick start guide
- User manual and DataView® application software included on USB Drive



Measure and record multiple measurements to create an illuminance map of the room or area of interest

Accessories/Replacement Parts

- 2118.65 Soft Carrying Case
- 2138.66 Cable - 6ft USB Type A - Type B Micro
- 2118.09 General Purpose Carrying Case
- 2122.31 Shock Proof Housing
- 2153.78 Adapter - US Wall Plug to USB
- 5000.44 Multifix Universal Mounting System



Lightmeter Data Logger Model 1110

Measurement ranges	0.1 lx to 200,000 lx (lux)	0.01 fc to 18,580 fc (foot-candle)
Resolution	0.1 lx (0.1 lx to 999.9 lx) 1 lx (1 000 lx to 9,999 lx) 10 lx (10,000 lx to 99.99 klx) 100 lx beyond	0.01 fc (0.01 fc to 99.99 fc) 0.1 fc (100.0 fc to 999.9 fc) 1 fc (1,000 to 9.999 fc) 10 fc beyond

METROLOGICAL SPECIFICATIONS

	Class C luxmeter as per NF C 42-710 standard	Mode with compensation
Accuracy for measurement in lux	± 3% of reading on incandescent sources (by default) ± 6% of reading on LEDs (3,000 K to 6,000 K) ± 9% of reading on fluorescent sources	LED mode: ± 4% of reading (at 4,000 K) Fluo mode: ± 4% of reading (type F11, 4,000 K)

FUNCTIONS

Recording	Manual start/stop Short press for MEM: spot recording / Long press for REC: recording at the user selectable rate Programmed recording rates from 1 minute to 2 hours Start date and end date can be customized with the PC software
Data storage	More than 1 million measurements
Min-Avg-Max	Real-time display of Min, Max and Average readings available at the press of a button
Hold	Freezes the measurement value on the display
MAP mode	The MAP function can be used to map the lighting on a surface or in a room. Lighting measurements are saved in the same file and available as a graphical display through the DataView software.
Units	lx or fc
Backlighting	Blue luminescent
Automatic power-off	User selectable choice of 3 minutes, 5 minutes, 10 minutes, or off through DataView software

POWER SOURCE

Type	3 x 1.5 V AA / LR6 alkaline batteries Connection to line power using supplied micro-USB cable. Wall adapter sold separately
Battery life	500 hrs (portable mode) / 3 years of recording (15-minute measurement interval)

PHYSICAL SPECIFICATIONS

Interfaces	2 communication modes: Bluetooth wireless link and USB
Mounting	Case equipped with a magnet for mounting to a metal surface and a tear drop for wall mounting Compatible with the Multifix accessory (cat. 5000.44)
Dimensions / weight	Case: 5.9 x 2.84 x 1.28" (150 x 72 x 32 mm) / Sensor: 2.64 x 2.52 x 1.38" (67 x 64 x 35 mm) / 12.2 oz (345 g) with batteries
Protection	IP50
Operating range	Temperature: 14 to 140 °F (-10 to +60 °C) / Humidity: 0 to 90 %RH
Compliance	IEC61010-1 / IEC 61326-1 / Class C luxmeter

GENERAL SPECIFICATIONS

DataView® software functions	Display as a graph or a table of values / Data export in graph or Microsoft Excel table form Real-time mode / Automatic report generation through standard or user customizable reports
Warranty	2 years

MODEL 1227

THERMO-ANEMOMETER

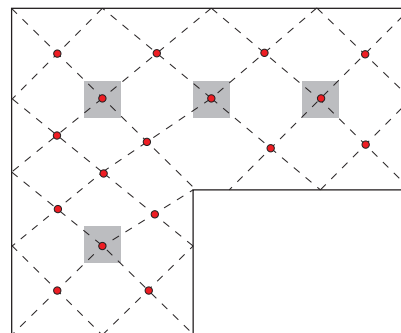


Measure air speed & flow rate in all situations

- ▶ Features
- ▶ Measures temperature and air measurements
- ▶ Dual line display
- ▶ User selectable wind speed or air flow measurement
- ▶ User selectable measurement units M/S, F/M, KM/M, M/H or M3/S, M3/H, L/S, CF/M
- ▶ Map mode profiles the air flow map of the area or room by storing multiple measurements
- ▶ Removable anemometer with expandable cord up to 48"
- ▶ Min, Max and Average measurements stored
- ▶ Hold function freezes the display
- ▶ Spot or continuous recording up to 1 million measurements stored in 8MB flash memory
- ▶ Blue luminescent backlit display
- ▶ USB and Bluetooth communication
- ▶ Magnetic mount
- ▶ Battery or USB powered
- ▶ DataView® graphing and analysis software included

Product 2121.72 Includes

- Soft carrying case
- 3 x 1.5 V AA alkaline batteries
- 6ft USB cable, type A to type B USB
- Quick start guide
- User manual and DataView® application software included on USB Drive



Measure and record multiple measurements to create a map of air flow of the room or area of interest

Accessories/Replacement Parts

- 2118.65 Case – Soft Carrying Case
- 2122.33 Replacement Air Flow Sensor
- 2138.66 Cable - 6ft USB Type A - Type B Micro
- 2118.09 General Purpose Carrying Case
- 2122.31 Shock Proof Housing
- 2122.32 Set of Air Flow Measurement Cones
- 2153.78 Adapter – US Wall Plug to USB
- 5000.44 Multifix Universal Mounting System



Cat. #2122.32 Set of Air Flow Measurement Cones



Thermo-Anemometer Data Logger Model 1227

AIR SPEED AND FLOW RATE

Type of sensor	Vane / Optical Detection	
	Speed	Flow rate
Measurement range	0.25 m/s to 35.0 m/s (49.0 to 6890.0 fpm)	0.00 to 2,999 m3/h
Resolution	0.01 m/s (0.25 to 2.99 m/s)/0.1 fpm (49.0 to 99.9 fpm) 0.1 m/s (3.0 to 35.0 m/s) / 1 fpm (100 to 6,850 fpm)	0.01 m3/h (0.00 to 2.99 m3/h) 0.1 m3/h (3.0 to 99.9 m3/h) 1 m3/h (100 to 2,999 m3/h)
Accuracy	± 3 % of reading ± 4 counts	± 8% of reading

TEMPERATURE

Type of sensor	CTN
Measurement range	- 20.0 to + 50.0 °C/ - 4 to + 122 °F
Resolution	Display in °C: 0.1°C Display in °F: 0.1°F
Accuracy (°C)	0 to 50 °C: ± 0.8 °C / -20 to 0 °C: ± 1.6 °C

FUNCTIONS

Recording	Manual Start / Stop Short press for MEM: spot recording / Long press for REC: recording at the user selectable rate Programmed recording rates from 1 minute to 2 hours Start date and end date can be customized with the PC software
Data Storage	More than 1 million measurements
Min-Avg-Max	Real-time display of Min, Max and Average readings available at the press of a button
Hold	Freezes the measurement value on the display
MAP mode	The MAP function can be used to map the air speeds measured
Flow-rate measurement	Yes: direct reading with the cones proposed as accessories or on the basis of a surface defined by the user.
Backlighting	Blue Luminescent
Units	Air-speed units: m/s, km/h, fpm, mph - Air flow-rate units: m3/s, m3/h, l/s, cfm
Automatic power-off	User selectable choice of 3 minutes, 5 minutes, 10 minutes, or off through DataView software

POWER SUPPLY

Type	3 x 1.5V AA / LR6 alkaline batteries Connection to line power using supplied micro-USB cable. Wall adapter sold separately
Battery life	200 hrs (portable mode) / 8 days of recording (15-minute intervals)

PHYSICAL SPECIFICATIONS

Interfaces	2 communication modes: Bluetooth wireless link and USB
Mounting	Case equipped with a magnet for mounting to a metal surface and a tear drop for wall mounting Compatible with the Multifix accessory (cat. 5000.44)
Dimension/weight	Case: 5.9 x 2.84 x 1.28" (150 x 72 x 32mm)/ Sensor: 6.3 x 3.15 x 1.5" (160 x 80 x 38mm)/ 14.1oz (400g) with batteries
Protection	IP54
Operating range	Temperature: 14 to 140 °F (-10 to +60 °C) / Humidity: 10 to 90 %RH
Compliance	IEC61010-1 / IEC 61326-1

GENERAL SPECIFICATIONS

DataView® software functions	Display as a graph or a table of values / Data export in graph or Microsoft Excel table form Real-time mode / Automatic report generation through standard or user customizable reports
Warranty	2 years

MODEL 1246

THERMO-HYGROMETER

Measure humidity & temperature in all conditions



FEATURES

- ▶ Measures temperature, humidity and dew point
- ▶ Dual line display toggles between any two of the measurements
- ▶ User selectable temperature units, °F, °C
- ▶ Built in sensor with removable protective cap
- ▶ Min, and Max measurements stored
- ▶ Hold function freezes the display
- ▶ Spot or continuous recording up to 1 million measurements
- ▶ Blue luminescent backlit display
- ▶ Programmable alarms for temperature and humidity through included software
- ▶ USB and Bluetooth communication
- ▶ Magnetic mount
- ▶ Battery or USB powered
- ▶ DataView® graphing and analysis software included

Product 2121.73 Includes

- Soft carrying case
- 3 x 1.5 V AA alkaline batteries
- 6ft USB cable, type A to type B USB
- Quick start guide
- User manual and DataView® application software included on USB Drive

Accessories/Replacement Parts

- 2138.66 Cable - 6ft USB Type A - Type B Micro
- 2154.71 Carrying Pouch
- 2118.09 General Purpose Carrying Case
- 2122.31 Shock Proof Housing
- 2153.78 Adapter - US Wall Plug to USB
- 5000.44 Multifix Universal Mounting System



Thermo-Hygrometer Data Logger Model 1246

RELATIVE HUMIDITY

Type	Capacitive sensor
Measurement range	3.0 to 98.0 %RH
Resolution	0.1 %RH
Accuracy	10 to 90 %RH: $\pm (2 \%RH \pm 1 \text{ ct})$, outside that range: $\pm (4 \%RH \pm 1 \text{ ct})$
Response time (66%)	60 s

TEMPERATURE

Type of sensor	Temperature sensor with semiconductor	
Measurement range	- 10.0 to + 60.0°C	14.0 to + 140.0°F
Resolution	Display in °C: 0.1°C	Display in °F: 0.1°F
Accuracy (°C)	10 to 40°C: $\pm (0.5^\circ\text{C} \pm 1 \text{ ct})$ outside that range: $\pm (0.032 \times (T-25) \pm 1 \text{ ct})$ / T= temperature in °C	
Response time (66%)	30 s	

DEW POINT

Measurement range	- 20.0 to + 60.0°Ctd	-4.0 to + 140.0 °Ftd
Resolution	Display in °C: 0.1°C	Display in °F: 0.1°F

FUNCTIONS

Recording	Manual Start / Stop Short press for MEM: spot recording / Long press for REC: recording at the user selectable rate Programmed recording rates from 1 minute to 2 hours Start date and end date can be customized with the PC software
Alarms	Alarm thresholds settable in the software / Recording can be triggered on an alarm threshold
Data storage	More than 1 million measurements
Min-Max	Real-time display of Min and Max readings available at the press of a button
Hold	Freezes the measurement value on the display
Units	°C or °F / %RH
Backlighting	Blue luminescent
Automatic power-off	User selectable choice of 3 minutes, 5 minutes, 10 minutes, or off through DataView software

POWER SUPPLY

Type	3 x 1.5V AA / LR6 alkaline batteries Connection to line power using supplied micro-USB cable. Wall adapter sold separately
Battery life	1,000 hrs (portable mode) / 3 years of recording (15-minute measurement interval)

PHYSICAL SPECIFICATIONS

Interfaces	2 communication modes: Bluetooth wireless link and USB
Mounting	Case equipped with a magnet for mounting to a metal surface and a tear drop for wall mounting Compatible with the Multifix accessory (cat. 5000.44)
Dimensions / weight	7.36 x 2.84 x 1.28" (187 x 72 x 32mm) / 14.1 oz (400 g) with batteries
Protection	IP54
Operating range	Temperature: 14 to 140 °F (-10 to +60 °C) / Humidity: 10 to 90 %RH
Compliance	IEC61010-1 / IEC 61326-1

GENERAL SPECIFICATIONS

DataView® software functions	Display as a graph or a table of values / Data export in graph or Microsoft Excel table form Real-time mode / Automatic report generation through standard or user customizable reports
Warranty	2 years

MODEL 1821/1822/1823

TEMPERATURE



Versatility & high performance temperature measurement

FEATURES

- ▶ Selectable Thermocouple type, J, K, T, N, E, R, S (Models 1821 & 1822)
- ▶ Single and dual channel models (1821 & 1822)
- ▶ Dual line display on model (1822)
- ▶ RTD temperature measurement (Model 1823)
- ▶ Works with 100 or 1000 Ohm platinum sensor (Model 1823)
- ▶ User selectable temperature units, °F, °C
- ▶ Min and Max measurements stored
- ▶ HOLD function freezes the display
- ▶ Spot or continuous recording up to 1 million measurements
- ▶ Blue luminescent backlit display
- ▶ Programmable store on alarm function
- ▶ Magnetic mount
- ▶ Programmable alarms through software
- ▶ DataView® graphing and analysis software included
- ▶ Battery or USB powered

Products Include

- 3 x 1.5V AA alkaline batteries
- 6ft USB cable, type A to type B USB
- Quick start guide
- Soft carrying case
- K Thermocouple needle sensor (Model 1821 only)
- (2) K Thermocouple flexible sensor (Model 1822 only)
- (1) 3 pin RTD connector (Model 1823 only)
- User manual and DataView® application software included on USB Drive

MODEL 1821
ORDER NUMBER: 2121.74

MODEL 1822
ORDER NUMBER: 2121.75

MODEL 1823
ORDER NUMBER: 2121.76

Accessories/Replacement Parts

- 2138.66 Cable - 6ft USB Type A - Type B Micro
- 5000.82 3-Prong Mini Flat Pin Connector (RTD) (for Model 1823)
- 5000.44 MultiFix Universal Mounting System
- 2154.71 Carrying Pouch
- 2153.78 Adapter - US Wall Plug to USB
- 2122.31 Shock Proof Housing



Temperature Data Loggers Models 1821, 1822, 1823

	1821 Thermocouple Thermometer J, K, T, N, E, R, S 1 channel	1822 Thermocouple Thermometer J, K, T, N, E, R, S 2 channels	1823 RTD Thermometer Pt100, Pt1000 1 channel
Measurement range	J - 210 to + 1,200 °C / -346 to + 2,192 °F K - 200 to + 1,372 °C / -328 to + 2,501 °F T - 250 to + 400 °C / -418 to + 752 °F N - 200 to + 1,300 °C / -328 to + 2,372 °F E - 150 to + 950 °C / -238 to + 1,742 °F R, S - 0 to + 1,767 °C / 32 to + 3,212 °F		- 100 to + 400°C -148 to + 752°F
Resolution	Display in °C: $\emptyset < 1,000$ °C : 0.1 °C and $\emptyset \geq 1,000$ °C : 1 °C Display in °F: $\emptyset < 1,000$ °F : 0.1 °F and $\emptyset \geq 1,000$ °F : 1 °F		Display in °C : 0.1°C Display in °F : 0.1°F
Accuracy (°C)	J, K, T, N, E $\emptyset \leq - 100^{\circ}\text{C} \pm (0.2\% \text{ Reading} + 0.6^{\circ}\text{C})$ $- 100^{\circ}\text{C} < \emptyset \leq + 100^{\circ}\text{C} \pm (0.15\% \text{ R} + 0.6^{\circ}\text{C})$ R, S $+ 100^{\circ}\text{C} < \emptyset \pm (0.1\% \text{ R} + 0.6^{\circ}\text{C})$ $\emptyset \leq + 100^{\circ}\text{C} \pm (0.15\% \text{ R} + 1.0^{\circ}\text{C})$ $+ 100^{\circ}\text{C} < \emptyset \pm (0.1\% \text{ R} + 1.0^{\circ}\text{C})$		$\pm (0.4\% \text{ R} + 0.3^{\circ}\text{C})$

FUNCTIONS

Recording	Manual start/stop Short press on MEM: spot recording / Long press on REC: recording at the user selectable rate Programmed recording rates from 1 minute to 2 hours Start date and end date can be customized with the PC software
Alarms	Alarm thresholds set using the software. Visual alert on the product in the event of an overrun Recording can be triggered on alarm thresholds
Data storage	More than 1 million measurements
Min-Max	Real-time display of Min and Max readings available at the press of a button
Hold	Freezes the measurement value on the display
Differential measurement	Model 1822 only
Units	°C or °F
Backlighting	Blue luminescent
Automatic power off	User selectable choice of 3 minutes, 5 minutes, 10 minutes, or off through DataView software

POWER SUPPLY

Type	3 x 1.5V AA / LR6 alkaline batteries Connection to line power using supplied micro-USB cable. Wall adapter sold separately
Battery life	Model 1821 & 1822: 1,000 hrs (portable mode) Model 1823 : 800 hrs (portable mode) 3 years for recording (15-minute measurement interval)

PHYSICAL SPECIFICATIONS

Interfaces	2 communication modes: Bluetooth and USB	
Mounting	Case equipped with a magnet, a wall mount system and a slot for suspension of the product. Compatible with the Multifix accessory (cat. 5000.44). Sheath available as an accessory	
Connections	Compensated miniature female connectors	3-point flat connector
Dimensions/Weight	5.9 x 2.84 x 1.28" (150 x 72 x 32mm) / 9.2oz (260g) with batteries	
Protection	IP54	
Operating Range	Temperature from 14 to 140 °F (-10 to +60 °C) / Humidity from 10 to 90 %RH	
Standards	IEC61010-1 / IEC 61326-1	

GENERAL SPECIFICATIONS

DataView® Software Functions	Real-time mode; Automatic report generation in Microsoft Word format Graph or value-table presentation; Data export in graph or Microsoft Excel table format
Warranty	2 years

MODEL 1510

AIR QUALITY DATA LOGGER

Monitor CO₂, temperature, and humidity for a healthy environment



SPECIFICATIONS

CO ₂ Measurement	
Measuring Principle	Non-dispersive infrared (NDIR) technology
Type of Sensor	Double-beam infrared cell sensor
Measurement Range	0 to 5000 ppm
Accuracy (CO ₂)	±50 ppm ±3% of value measured
Response Time, 63%	< 200 seconds
Resolution	1 ppm
Temperature Measurement	
Type of Sensor	CMOS
Units	°C or °F
Measurement Range	14° to 140°F (-10° to 60°C)
Accuracy	±0.1°F (±0.5°C)
Resolution	0.1°F (0.1°C)
Humidity Measurement	
Type of Sensor	Capacitive
Measurement Range	5 to 95% RH
Accuracy	±2% RH
Resolution	0.1% RH
General	
Recording Interval	Programmable from 1 minute to 2 hours
Storage	> 1 million measurements
Alarm	Yes
Backlighting Display, Hold, Min & Max	Yes
Auto Power OFF	Yes (in portable mode only)
Dimensions/Weight	4.92 x 2.58 x 1.26" (125 x 65.5 x 32mm)/ 6.7oz (190g) with batteries
Protection	IP40
Compliance	IEC 61010-1, 50V CAT II – IEC 61326-1
Power Supply	Alkaline batteries: 2 AA or rechargeable battery connection to 120V 60Hz line/USB to wall adapter
Communication	Bluetooth (Class I) wireless communication/USB link; the product is then recognized as a USB drive for easy file transfer
Mounting	Optional padlockable wall mount (padlock is not included), optional desktop stand and tear drop wall hook
DataView® Software	Graphic representation or as table of values, data export, real-time mode calculation of the confinement index with selection of presence periods & report generation

FEATURES



- ▶ CO₂, temperature, and humidity logger
- ▶ Free app available from Android and Google Play stores
- ▶ Compact and stand-alone: for mounting or portable use
- ▶ User-friendly: comfort indicators based on the CO₂, temperature and humidity levels
- ▶ Accurate: complies with the latest standards concerning air quality monitoring
- ▶ Quick, simple data download using supplied DataView® software
- ▶ On-site calibration test module with adapter, tube and software for adjusting the zero and thresholds

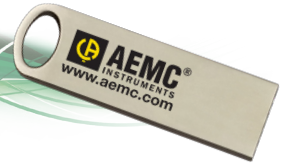
Products 2138.08 & 2138.09 Include

- Meter in carrying pouch
- Adapter - US wall to USB
- 6ft USB cable
- 2 AA batteries
- Quick start guide
- User manual and DataView® application software included on USB Drive

Accessories/Replacement Parts

- 2138.61 Wall Mount Holster (Gray)
- 2138.62 Desktop Stand (White)
- 2153.78 Adapter - US Wall Plug to USB
- 2138.67 Wall Mount Holster (White)

DataView®



Use DataView® to configure all user selectable functions on Models 1110, 1227, 1246, 1821, 1822, 1823 and 1510

You can view measurements in real-time, download & analyze stored data, and create customizable reports all with DataView®.

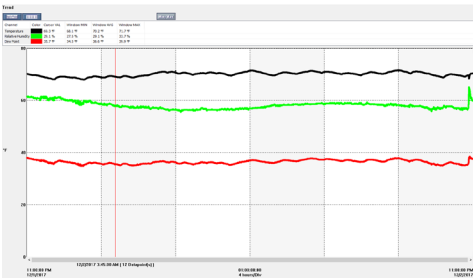
General
 Serial number: 123456ABC
 Model: 1246
 Firmware version: 02.00.12
 Instrument name: Thermo-Hygrometer
 Location:
Status
 In overload: No
 Alarm: Disabled
 Date: 12/5/2017
 Time: 3:30:43 PM
 Battery voltage: 4.14 V (Full)
Recording
 Recording status:
 Session(s): Idle
 Starting date/time:
 Ending date/time:
 Duration:
 Recording Storage Rate:
Channel Configuration
 Channel 1
 Units:
 Channel 2
 Units:
 Channel 3
 Units:

Typical status screen shows current state of the instrument

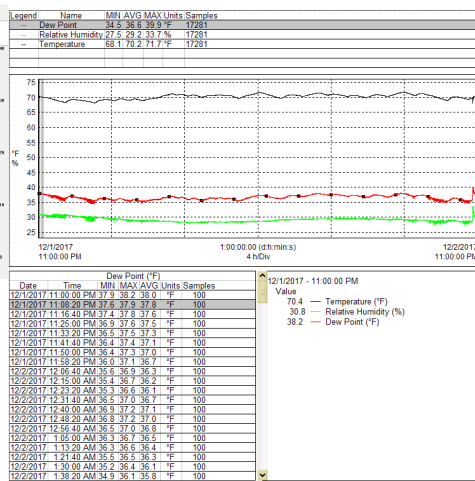
Configure Instrument
 General Recording Luxmeter
 Session name:
 Location:
 Session type
 Record now
 Schedule recording
 Start date: 1/11/2000 Start time: 6:55:27 PM
 End date: 1/11/2000 End time: 7:10:27 PM
 Recording duration: 000 : 00 : 15 : 00 (D : H : M : S) Reset date/time
 Sampling period
 Storage period: 1 s
 Memory
 10.91% of the memory
 7.10 Mbytes of available
 0.03% of the memory
 total memory capacity.
 recording settings.

Other screens allow for the selection of measurement units, alarm set points, and other user selectable parameters.

The recording configuration screen provides the ability to assign a name & location to the recording session, set the storage rate, and schedule when recordings will start and stop. It also displays memory usage.



Typical graphic of recorded data displays recorded measurements vs. time as well as min, max, and average measurements for the recording. A movable cursor lets you see values at the cursor location



A typical report will include a plot of the data as well as a listing of the measurements.

Trend Summary Report
 Recording Start Date: 12/4/2017
 Recording Duration: 15:05 (mm:ss)
 Instrument ID: 1245 12345678
 Database File Name: Thermo Hygrometer.dvb
 Comments: Operator ABC Environmental Test Engineer
 Test Site: Suite 300 James Smith 402 Fox Run Foxborough, MA 02035
 Comments: A test completed in the general office area confirmed that conditions were properly maintained. No further testing required at this time. Repeat monitoring in 6 months

A report cover sheet provides information about the operator and the test site as well as a comment section for the operator to type in the test results and recommendations

MODELS CA811 & CA813

LIGHTMETER



FEATURES

- ▶ Easy one-hand operation
- ▶ Designed to measure a wide range of lighting types (Model CA813)
- ▶ Removable sensor for remote reading
- ▶ Measures in foot-candles (fc) or lux (lx)
- ▶ Measures incandescent lighting
- ▶ Cosine corrected
- ▶ Hold function
- ▶ Max function (Model CA811)
- ▶ Peak function (Model CA813)
- ▶ CIE photopic (human eye) response
- ▶ Lightweight and compact
- ▶ Removable protective sensor cover
- ▶ Includes rugged, shockproof, protective, and dirt resistant gray cover

Features optical sensors that are designed to match the response of the human eye

SPECIFICATIONS

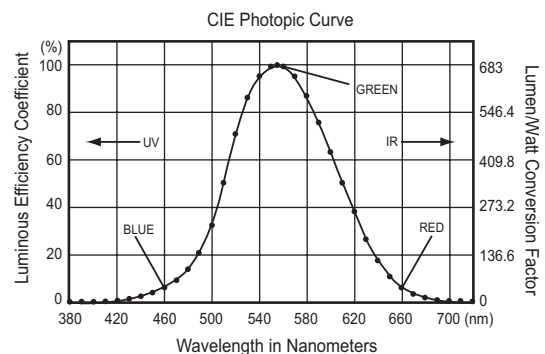
MODELS	CA811	CA813*
Range	20fc, 200fc, 2000fc, 20kfc	20fc, 200fc, 2000fc, 20kfc
	20lx, 200lx, 2000lx, 20klx	20lx, 200lx, 2000lx, 20klx, 200klx
Display Resolution	0.01fc or 0.01lux	
Sensor	Silicon photodiode	
Spectral Response	CIE Photopic Curve	
Accuracy	±5% of Reading ±10cts	±5% of Reading ±10cts ±11% of Reading ±2cts
	2856K Light Source Common Light Source ±18% of Reading ±2cts	
Sample Rate	2.5 times per second, nominal	2.5 times per second, nominal
General		
Display	3½ digit liquid crystal display (LCD), 2000-count	
Operating Temperature	32° to 122°F (0° to 50°C), <80% RH	
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery	
Polarity	Automatic	
Power Source	One 9V Alkaline battery (included)	
Low Battery Indication	Displayed when battery voltage is low	
Dimensions	6.81 x 2.38 x 1.5" (173 x 60.5 x 38mm)	
Weight	Approx. 7.55oz (214g) including battery	Approx. 7.9oz (224g) including battery

Products 2121.20 & 2121.21 Include

- Shockproof holster
- 9V battery
- User manual

Applications

- ▶ Testing for OSHA compliance in workplace, cleanroom and industrial settings
- ▶ Ambient testing for light-sensitive displays and archives in museums and art galleries



**Note: Model CA813 offers higher sensitivity (200klux) and has a better spectral response to common light sources. Model CA811 is used to measure incandescent lighting.*

SOUND LEVEL METER

MODEL CA832



FEATURES

- ▶ Easy one-hand operation
- ▶ Measures sound according to the sensitivity of the human ear
- ▶ Max function
- ▶ Auxiliary output for recording
- ▶ Tripod mountable
- ▶ Lightweight and compact
- ▶ Includes rugged, shockproof, protective, and dirt resistant gray cover

Product 2121.23 Includes

- Shockproof holster
- Protective foam microphone cap
- Screwdriver
- Male jack connector
- Assembly screw for camera type tripod
- 9V battery
- User manual

Applications

- ▶ Factories
- ▶ Schools and Libraries
- ▶ Airports
- ▶ Office environments and studios
- ▶ Auditoriums
- ▶ Hospitals



Designed to assess sound ambiances in accordance with international safety and quality standards

SPECIFICATIONS

MODEL	CA832
Measurements	
Measurement Range	37 to 80dB 50 to 100dB 80 to 130dB
Measurement Rate	2.5 times per second
Dynamic Range	50db
Frequency Range	31.5 to 8000Hz
Accuracy	±1.5dB (ref. 94dB@1kHz)
Resolution	0.1dB
Precision	±2.0dB
Display	2000-count
Sensor Type	0.5" (13mm) electric (pre-polarized) condenser microphone True RMS measurement with independent frequency weighting
Applicable Standard	IEC 651 type 2/ANSI S 1.4 type 2/JIS C 1502
Auxiliary Output	DC output: 10mV/dB – 50Ω AC output: 1.0Vrms – 600Ω
Frequency Weighting	Curves A and C
Time Weighting	S (slow)-550ms and F (fast)-55ms
General	
Display	3½ digit liquid crystal display (LCD), 2000-count
Operating Temperature	32° to 122°F (0° to 50°C), 80% RH without condensation
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery
Power Source	One 9V Alkaline battery (included)
Low Battery Indication	Displayed when battery voltage is low
Dimensions	9.33 x 2.38 x 1.5" (237 x 60.5 x 38mm)
Weight	8.11oz (230g) including battery

MODELS CA846

THERMO-HYGROMETER



Provides excellent response time to changes in temperature, good repeatability and accurate readings

SPECIFICATIONS

MEASUREMENTS — TEMPERATURE

Measurement Range	-4° to 140°F (-20° to 60°C)
Display Resolution	0.1°F (0.1°C)
Sensor	NTC Temperature Sensor
Accuracy	-4° to 32°F: ±2°F (-20° to 0°C: ±1°C) 32° to 140°F: ±1°F (0° to 60°C: ±0.5°C)

MEASUREMENTS — RELATIVE HUMIDITY

Measurement Range	0 to 100% RH
Display Resolution	0.1% RH
Sensor	Capacitive Humidity Sensor
Accuracy	±5.0%, 25°C, 10% to 90% RH ±10.0%, 25°C, 0% to 10% RH, 90% to 100% RH

GENERAL

Display	3½ digit liquid crystal display (LCD), 2000-count
Operating Temperature	32° to 122°F (0° to 50°C), 80% RH
Storage Temperature	-4° to 140°F (-20° to 60°C), 0 to 80% RH without battery
Polarity	Automatic
Power Source	One 9V Alkaline battery (included)
Low Battery Indication	Displayed when battery voltage is low
Dimensions	6.81 x 2.38 x 1.5" (173 x 60.5 x 38mm)
Weight	Approx. 7oz (197g) including battery

FEATURES

- ▶ Easy one-hand operation
- ▶ Measures temperature in °F and °C
- ▶ Accurate NTC sensor
- ▶ Quick response RH sensor
- ▶ Max and Hold functions
- ▶ 2000-count backlit LCD
- ▶ Lightweight and compact
- ▶ Removable protective sensor cover
- ▶ Includes rugged, shockproof, protective and dirt resistant gray cover

Applications

- ▶ Greenhouses
- ▶ HVAC installation and maintenance
- ▶ Office environments
- ▶ Labs
- ▶ Environmental studies
- ▶ Weather monitoring
- ▶ Food distribution and storage
- ▶ Blood banks

Product 2121.24 Includes

- Shockproof holster
- 9V battery
- User manual

INFRARED THERMOMETER

MODEL CA879



Provides precision measurement with its laser target feature

SPECIFICATIONS

ELECTRICAL	
Measuring Range	-58° to 1022°F (-50° to 550°C)
Resolution	0.1°F from -58° to 200°F, 1°F beyond this range 0.1°C from -50° to 200°C, 1°C beyond this range
Polarity	Automatic (minus only)
Accuracy	±1.5% of Reading ±4°F from -4° to +1022°F / ±9°F of -58° to -4°F ±1.5% of Reading ±2°C from -20° to +550°C / ±5°C of -50° to -20°C
Emissivity	Preset at 0.95
Spectral Response	6 to 14µm
Response Time	400ms
Laser Target	1mW (670nm type)
Power Source	One 9V Alkaline battery included (6LR61 or 6LF22)
MECHANICAL	
Dimensions	9.05 x 3.93 x 2.20" (230 x 100 x 56mm)
Weight	10.23oz (290g)
ENVIRONMENTAL	
Operating: Temperature Humidity	32° to 122°F (0° to 50°C) 10 to 90% RH
Storage: Temperature Humidity	-4° to 140°F (-20° to 60°C) without battery < 80% RH
SAFETY	
Electromagnetic Compatibility	EN 50081-1 Ed. 1992: EN 55022 EN 50082-1 Ed. 1997: EN 55024

FEATURES

- ▶ Easy one-hand operation
- ▶ Non-contact infrared sensor
- ▶ Laser guide for precise aim
- ▶ 12:1 Field of Vision Ratio
- ▶ Measures temperature in °F and °C
- ▶ Fixed 0.95 emissivity
- ▶ Auto-HOLD function
- ▶ 2000-count backlit LCD

Product 2121.37 Includes

- Soft carrying case
- 9V battery
- User manual



Applications

- ▶ Electrical troubleshooting
- ▶ Food safety and processing
- ▶ Automotive repair and maintenance
- ▶ Marine maintenance and repairs
- ▶ Test faulty motor winding insulation
- ▶ Test overheated high voltage transformers
- ▶ Test terminals on circuit breaker panels
- ▶ Perform HVAC energy audits

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