All you need

for accurate &
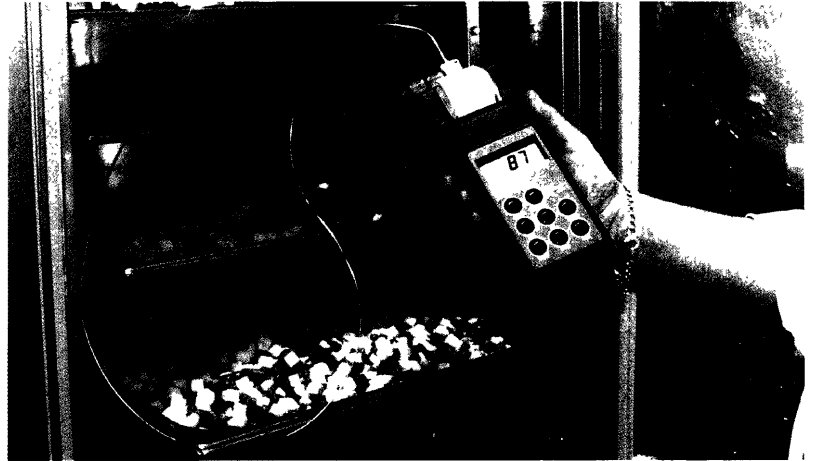# documented
temperature
measurement

HANNA
instruments

Manufacturers since 1978

Portable thermometers with built-in printers and logging capability

The Hanna printing and logging thermometers have been developed for a wide spectrum of applications from HACCP and food safety to heavy industry There are two basic models **thermistor for low temperature** measurements of –50 to 150°C (-55 to 300°F) and KJT **thermocouple measuring temperature from-200 to 1370°C (-300 to 2500°F)** In addition to the standard single channel thermometers, you can also opt for the multi-channel models, where **up to 4 probes** can be plugged into the same meter to measure independent temperatures All versions provide instant printout of the reading and can memorize the data singularly or in batches The printouts show the temperature together with time, date and sample number These features satisfy the most stringent requirements of the food industry and regulatory bodies where documentation and/or recording of data is necessary You can also **log the measurements** at a given interval from 1 minute to 3 hours **without any supervision** In addition, by simply pressing LOG you can memorize, print and later retrieve a specific measurement With GLP
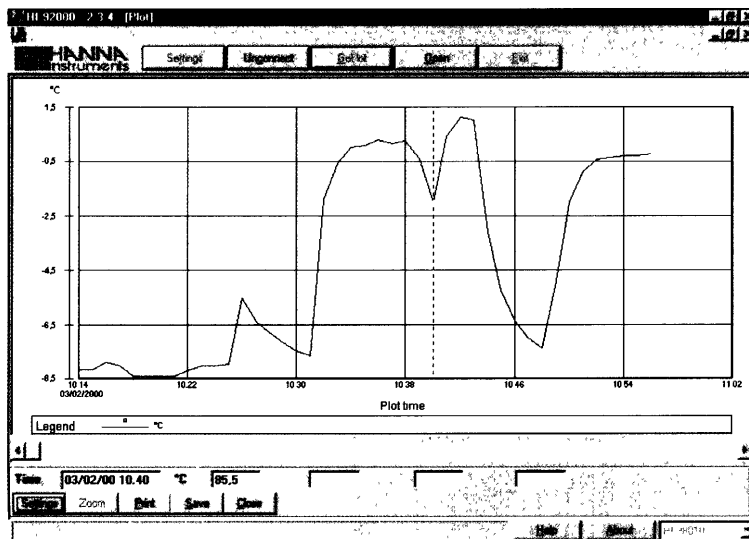
(Good Laboratory Practice) capability, you will know when the meter was last calibrated and when it is due for recalibration – yet another important feature for food safety With the built-in **password protection**, you can limit access to the calibration data and the GLP settings

Notwithstanding the hi-tech nature of the meters, simplicity-of-operation was the buzz word of their design concept In fact most functions are menu-driven with helpful prompts and the meters can be customized For example, you can select the auto-off pe-

riod most suited to your application The thermometer will then switch itself off automatically after a period of inactivity between 5 and 60 minutes In the setup function, you can also select from Celsius or Fahrenheit scales

Do you have to take measurements in dimly-lit areas? Not to worry! All meters in this series come with a **backlight feature illuminating the LCD** A low battery indication will provide a forewarning and the Hanna exclusive BEPS system will ensure that no erroneous measurements are taken due to low volt-

Print, log, download and retrieve the measured temperature at will

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             10-03-98
==07==       0005M
◊0016        *16.25

             4.5 °C
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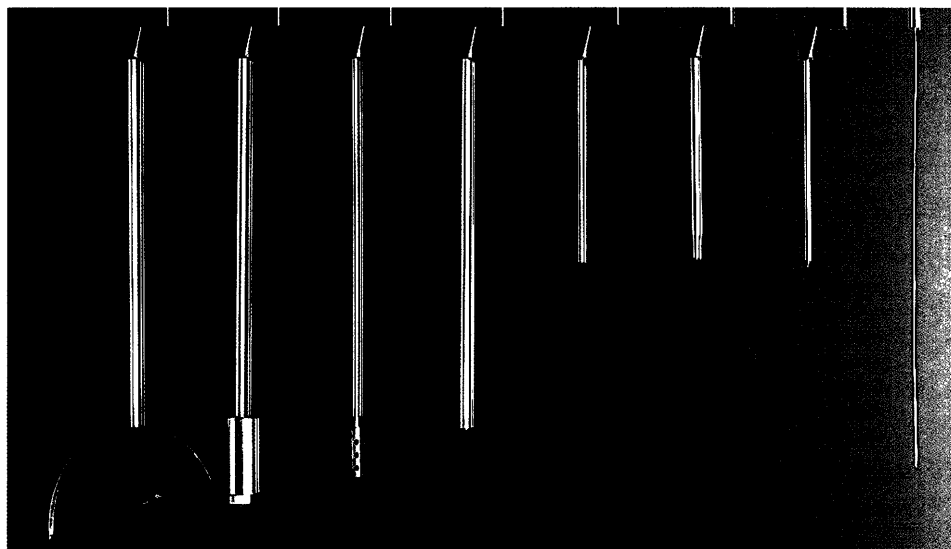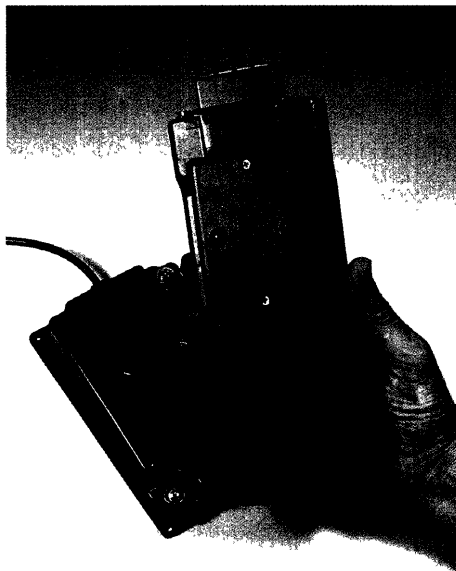
age For the more discerning operators needing continuous printing and logging, there is also a 12 VDC power inlet and an adapter is included in the standard package

The internal nonvolatile memory can **store up to 14000 individual data** These can be transferred to a PC through the infrared cradle (HI 9200) Unlike conventional portable units that transmit data via cable, **HI 98801-HI 98840** thermometers use infrared transmission to eliminate the inevitable wear and tear of the connectors - a common source of malfunctioning An internal lithium battery powers the clock circuitry The single-channel **HI 98810** is even supplied with the general-purpose HI 762BL thermistor probe

If you would like your meters to come with a factory calibration certificate against an NIST standard, simply add "/C" to the end of the part number (e g HI 98810/C) In spite of all the features, the Hanna thermometers are offered at prices accessible to everyone

Download through
an infrared
cradle and customize
the data with
Hanna's Windows®
based software

Choose from
a wide range
of Hanna thermistor
and thermocouple
probes designed
to meet your
needs

Probes for:

HI 98801 · HI 98804

K-type Thermocouple probes

Code	Application
HI 766A	Roller surface
HI 766B1	Surface, 90° angle
HI 766B2	Surface
HI 766C	Penetration
HI 766C1	Penetration, ultra-fast
HI 766E1	Liquids
HI 766E2	Liquids, long-stem
HI 766F	Wire, high-temperature
HI 766F1	Wire

HI 98810 · HI 98840

Thermistor probes

Code	Application
HI 762A	Air and gas
HI 762L	Liquids
HI 762PBL	Penetration, blue handle
HI 762PG	Penetration, green handle
HI 762PR	Penetration, red handle
HI 762PW	Penetration, white handle
HI 762PWL	Penetration with reinforced shaft
HI 762W	Wire

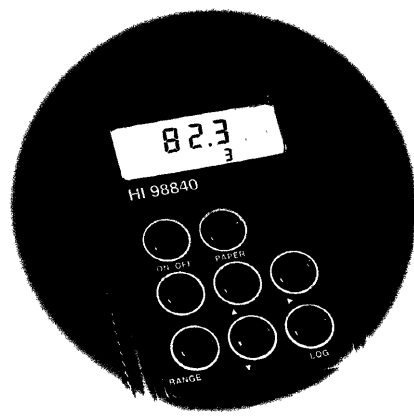# Recording and printing thermometers at affordable prices

SPECIFICATIONS HI 98801 · HI 98804 HI 98810 · HI 98840

RANGE	HI 98801/HI 98804	K: -200.0 to 999.9°C; 1000 to 1370°C; -300.0 to 999.9°F; 1000 to 2500°F J: -200.0 to 760.0°C; -300 0 to 999 9°F; 1000 to 1400°F T: -200.0 to 400.0°C; -300.0 to 750 0°F
	HI 98810/HI 98840	-50 0 to 150 0°C; -55 0 to 300 0°F
ACCURACY	HI 98801/HI 98804	±0 5°C (-200 0 to 999.9°C), ±1°C (outside); ±1°F
	HI 98810/HI 98840	±0.4°C (-20 to 120°C); ±0.7°C (outside); ±0.8°F (-4 to 248°F); ±1.3°F (outside)
PROBE	HI 98801/HI 98804	K,J,T-type thermocouple (optional)
	HI 98810/HI 98840	HI 762BL (included with HI 98810)
PRINTING & LOGGING INTERVALS		Selectable from 1, 2, 5, 10, 15, 30, 60, 120 and 180 minutes
COMPUTER INTERFACE		HI 9200 infrared transmitter through RS232 serial port
POWER SUPPLY		4 x 1.5V AA batteries/approx. 350 hours of use (without printing and backlight). Auto-off selectable after 5, 10, 15, 30, 45 or 60 minutes of non-use. Socket for 12VDC.

Documentary evidence that temperature never exceeded predetermined levels

With the backlight LCD, measurement in dimly-lit areas is no longer a problem

HI 98810   single-channel thermistor thermometer supplied with HI 762BL probe

HI 98840   4-channel thermistor thermometer

HI 98801   single-channel thermocouple thermometer

HI 98804   4-channel thermocouple thermometer

All models are supplied with 5 rolls of printer paper, 4 AA 1.5V batteries and hard carrying case

For calibration certificate against NIST standard, add "/C" to the end of part number.

Accessories

HI 710005,   110V to 12 VDC (US) adapter

HI 710006,   220V to 12 VDC (European) adapter

HI 710034,   paper roll (10 pcs)

HI 9200/9,   infrared transmitter (9-pin)

HI 92000,   Windows® compatible software

HI 721317,   hard carrying case

The Hanna logging thermometers are ideal stand-alone instruments memorizing data at user selectable interval

HANNA instruments

For the Hanna office nearest to you check out our web site

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Authorized Dealer