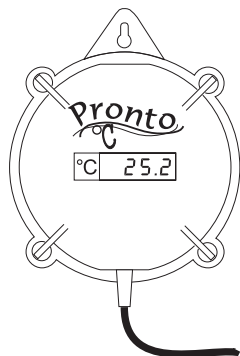


## Instruction Manual

**Pronto & Pronto**

(HI 146-00 & HI 146-01)

### Thermometers



**HANNA**  
instruments  
www.hannainst.com

Dear Customer,  
Thank you for choosing a Hanna product.  
Please read carefully this manual before using the meter.  
If you need additional technical information, do not hesitate  
to e-mail us at [tech@hannainst.com](mailto:tech@hannainst.com).  
These instruments are in compliance with the **CE** directives.

### PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully. If any damage has occurred during shipment, immediately notify your Dealer or the nearest Hanna Customer Service Center.

Each meter is supplied with battery and instructions

**Note:** Conserve all packing material until the instrument has been observed to function correctly. Any defective item must be returned in its original packing.

Hanna Instruments reserves the right to modify the design, construction and appearance of its products without advance notice.

### GENERAL DESCRIPTION

These instruments are specially designed to meet the needs of simple continuous monitoring of temperature.

The housing has been completely sealed against vapors and humidity with IP54 rating.

You can simply hang the meter right above the sample to be tested for continuous measurement.

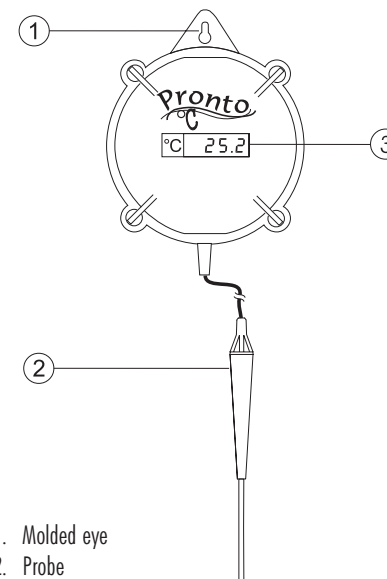
The probe is easy to clean and requires little maintenance.

Two models are available:

- HI 146-00 displays temperature in Centigrade degrees
- HI 146-01 displays temperature in Fahrenheit degrees.

A protected switch allows a quick check of the meter accuracy at any time.

### FUNCTIONAL DESCRIPTION



1. Molded eye
2. Probe
3. Liquid Crystal Display



**PEWA**  
Messtechnik GmbH

Weidenweg 21  
58239 Schwerte

Tel.: 02304-96109-0  
Fax: 02304-96109-88  
E-Mail: [info@pewa.de](mailto:info@pewa.de)  
Homepage : [www.pewa.de](http://www.pewa.de)

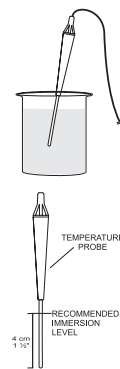
## SPECIFICATIONS

HI 146-00	
Range	-50.0 to 150.0°C
Resolution	0.1°C
Accuracy	±0.3°C (-20 to 90°C), ±0.5°C (outside)
Typical EMC Deviation	±0.3°C
HI 146-01	
Range	-58.0 to 302°F
Resolution	0.1°F (-58.0 to 199.9°F), 1°F (200 to 302°F)
Accuracy	±0.5°F (-4 to 194°F), ±1°F (outside)
Typical EMC Deviation	±0.5°F
Common Specifications	
Probe	Stainless steel probe with 2 m (6.6') cable
Battery Type	1 x 1.5V AA alkaline
Battery Life	approx. 5 years
Casing	IP54
Environment	0 to 50°C (32 to 122°F); RH max 95%
Dimensions	86 x 110 x 43 mm (3.4 x 4.3 x 1.7")
Weight	150 g (5.3 oz.)

## OPERATIONAL GUIDE

### OPERATION

- Dip the probe in the sample.  
An immersion level of 4 cm (1 ½") is recommended.
- Do NOT immerse the probe handle.
- Do NOT wrench the probe or put heavy objects on the cable. If the cable is damaged, the meter needs to be replaced.
- Wait for a few seconds for the display to stabilize.
- Variations in readings or fading display can indicate a weak battery.



### CALIBRATION CHECK SWITCH

Remove the back cover and move the internal switch to the "TEST" position.

The display should show  $0.0 \pm 0.3^\circ\text{C}$  ( $32.0^\circ\text{F} \pm 0.5^\circ\text{F}$ ).

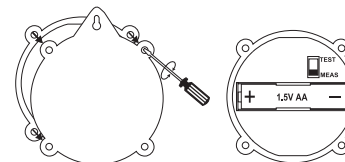
Contact your dealer or the nearest Hanna Service Center for recalibration, if necessary.

To return to the measurement mode, move back the switch to "MEAS" position. Replace the back cover and tighten the screws.

## BATTERY REPLACEMENT

When the display fades, remove the back cover and replace the 1.5V AA battery with a new one, while paying attention to its polarity. Close the meter.

Battery should only be replaced in a safe area using the battery type specified in this instruction manual.



## CE DECLARATION OF CONFORMITY

### Recommendations for Users

Before using these products, make sure that they are entirely suitable for the environment in which they are used. Operation of these instruments in residential areas could cause unacceptable interferences to radio and TV equipment. Any variation introduced by the user to the supplied equipment may degrade the instrument's EMC performance. To avoid electrical shock, do not use these instruments when voltages at the measurement surface exceed 24 Vac or 60 Vdc. To avoid damages or burns, do not perform any measurement in microwave ovens.

<b>HANNA</b> <small>INSTRUMENTS</small>	
<b>CE</b> <small>DECLARATION OF CONFORMITY</small>	
We, Hanna Instruments Italia Srl via E. Fermi, 10 33039 Sarnano di Bolognese (PD) ITALY herewith certify that the following:	
<b>HI 146</b>	
has been tested and found to be in compliance with the following regulations:	
EMC 80-2 EMC 80-5 EN 50022 EN 61010-1	Electromagnetic Compatibility CE Marking CE Marking CE Marking CE Marking
Date of Issue: 2023/01/01	
On behalf of: Hanna Instruments S.r.l.	

## WARRANTY

HI146 is warranted for two years against defects in workmanship and materials when used for its intended purpose and maintained according to instructions. The probe is warranted for a period of six months.

This warranty is limited to repair or replacement free of charge. Damages due to accident, misuse, tampering or lack of prescribed maintenance are not covered.

If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

IST146R2 05/05