# Temperature Dataloggers

The HI141 dataloggers are housed in a smooth, yet tough ABS casing that is sealed against ingress of dust and water. They can be placed with goods on the move, on supermarket shelves and in warehouses. They record the temperature at a given interval to make sure that perishable goods are not left unattended, such as on a loading dock on the other side of the world. These dataloggers can provide that extra guarantee that goods never ventured out of limits of public safety.

HI141 models offer users many alternatives, including one or two channels, internal or external temperature sensors, and an optional LCD display. External temperature sensor models feature one or two stainless steel sensors on a 1 m (3.3') cable for direct insertion.

HI141 can store up to 16,000 temperature samples in a protected, non-volatile EEPROM memory. The logging interval can be set from oncepersecond to onceper 24 hour period, and logging delay can be set anywhere up to 199 hours. The MIN or MAX temperature between logging intervals can also be stored. All of your collected data is tamper-proof and stored into serial numbered lots. All parameters can be set through our Windows® compatible software (for 32-bit systems) through RS232 communication and an infrared transmitter (software and transmitter not included). HI141 models also feature programmable alarms and logging intervals and Hanna's Battery Error Prevention System (BEPS) that will shut the meter off when the battery power is too low for an accurate measurement.

## • Waterproof

- The case of the HI141 dataloggers is waterproof rated IP67. A convenient hanging hook is also located at the top of the housing on all models that end in "H".
- °C/°F Ranges
- Through the PC application software, all HI141 models can be programmed to read in Celsius or Fahrenheit.
- One or Two Channels
- HI141 dataloggers offer the option of one or two measurement channels. Users can opt for one internal channel, one external channel, one internal and one external channel, or two external channels.



### Internal/External Sensors

- HI141 models that allow for an external temperature sensor feature one or two stainless steel probes on a 1 m (3.3') cable for direct insertion.
- LCD Display
  - The optional LCD is divided into 3 areas: the top displays the status of the datalogger; the middle displays the temperature reading, units, and active channel; the bottom displays useful information regarding alarms, battery, sample number, and indicating icons.
- Data Logging
  - The HI141 can store up to 16,000 measurements at selectable intervals from 1 second to 24 hours. Users can also program a delayed logging start time up to 199 hours.
- Magnetic Start Key
  - Once all the settings are programmed using the PC software (for 32-bit systems), a convenient and portable magnetic start key can be used to initiate when data logging begins. This

helps users to quickly begin logging, preventing the need to access and start via the computer software.

# • PC Connectivity

 Logged data can be transferred to a PC by simply placing the instrument on the HI141001 infrared cradle (not included). The infrared cradle eliminates the need to put a connector on the meter

 an undesirable dirt-trap in the food market and source of problems due to wear and tear over time. Using the cradle and software, users need just one PC interface to handle all HI141 dataloggers, each identified by a unique ID code. A security password is also able to be set to ensure collected data is tamper-proof.

#### Programmable Alarms

 High and low alarm thresholds can be programmed to alert users if the temperature readings go outside of the acceptable range. The PC software (for 32-bit systems) can also indicate the length of time that temperatures remained unacceptable.

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## • Status Indicator Lights

 There are 4 LED lights located on the face of all HI141 dataloggers. The bottom top LEDs are used for communication with the infrared transmitter, while the logging status is indicated by the 2 top LEDs that are green and red.

# • Enhanced Battery Life

• The HI141 series uses AA batteries to achieve a long battery life of about 4 years at 25°C.

## • Battery Error Prevention System (BEPS)

• The Battery Error Prevention System will shut the meter off when the battery power is too low for an accurate measurement.

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Specifications	Model	Display	Molded Eye for Hanging	Sensor(s)	Cable Length (if applicable)	Range		
Model Specific	HI141AH		٠	1 internal	-	-40.0 to 80.0°C / -40.0 to 176.0°F		
	HI141BH		•	1 external	1 m (3.3′)	-40.0 to 125.0°C / -40.0 to 257.0°F		
	HI141CH	•	•	1 internal	-	-20.0 to 70.0°C / -40.0 to 158.0°F		
	HI141DH	•	•	1 external	1 m (3.3')	-40.0 to 125.0°C / -40.0 to 257.0°F		
	HI141EH			1 internal	1 m (3.3′)	-40.0 to 80.0°C / -40.0 to 175.0°F		
	<b>NI141EN</b>		·	1 external		-40.0 to 125.0°C / -40.0 to 257.0°F		
	HI141FH		٠	2 external	1 m (3.3')	-40.0 to 125.0°C / -40.0 to 257.0°F		
	HI141GH	•	•	1 internal	1 m (3.3')	-20.0 to 70.0°C / -40.0 to 158.0°F		
	114101			1 external		-40.0 to 125.0°C / -40.0 to 257.0°F		
	HI141JH	•		2 external	1 m (3.3')	-40.0 to 125.0°C / -40.0 to 257.0°F		
All Models	Resolution	0.1°C (-40.0 to 100.0°C); 0.2°C (> 100.0°C) 0.1°F (-40.0 to 190.0°F); 0.3°F (> 190.0°F)						
	Accuracy	$\pm 0.5^{\circ}$ C (-40.0 to 0.0 and 70.0 to 100.0°C); $\pm 0.4^{\circ}$ C (0.0 to 70.0°C); $\pm 1.0^{\circ}$ C (> 100.0°C); $\pm 1.0^{\circ}$ F (-40.0 to 32.0 and 158.0 to 212.0°F); $\pm 0.8^{\circ}$ F (32.0 to 158.0°F); $\pm 2.0^{\circ}$ F (> 212.0°F)						
	Battery Type / Life	3.6V lithium AA battery / approx. life of 4 years at 25°C						
	Environment	RH100%						
	Diameter	86.5 mm (3.4")						
	Height	35 mm (1.4")						
	Weight	150 g (5.5 oz.)						
Ordering Information	All HI141 mode	s are supplied with 3.6V Lithium AA battery, magnetic key and instructions.						
Accessories	HI141000	Windows® compatible s	software (required)					
	HI141001	infrared transmitter (required)						
	HI740033	3.6 V AA lithium battery						
	HI740221	key for HI141 magnetic start						

