



Products that Address Your

# Food & Dairy Safety Needs



## Multiparameter Food Titration System

*Customizable to your specific application*

### Food and Dairy Analysis

The HANNA HI 901 measures pH, acidity, NaCl, calcium, chloride, SO<sub>2</sub>, alkalinity and more.

### Wine Analysis

The HANNA HI 901 can measure critical parameters in wine such as pH, free SO<sub>2</sub>, total SO<sub>2</sub>, total acidity, volatile acidity, reducing sugars, nitrogen and more.

### Water Analysis

pH, alkalinity, hardness, calcium, fluoride and more.

- Performs acid/base and potentiometric titrations
- This versatile titrator supports up to 10,000 titration methods (standard and user defined)
- Large backlit LCD screen
- User customized reports can be printed, saved on disc or transferred to PC via RS232 interface

 **HANNA**<sup>®</sup>  
instruments  
With Great Products, Come Great Results™  
[www.hannainst.com](http://www.hannainst.com)



## HI 99161 Portable Dairy and Cheese pH Meter

*Built for Industry with Specialized Probe*

- Water and humidity proof
- Electrode features a built-in temperature sensor
- Automatic temperature compensation

### Specific Food Industry pH Electrode

FC 202D is built with a non toxic material, open junction and conic tip for easy penetration even in semisolid samples.



## HI 99163 Meat pH Meter

*Built for Industry with Specialized Probe*

- Direct meat pH readings
- Water and humidity proof
- Easy to calibrate and clean

### Food Industry Specific Meat Electrode with Penetration Blade

FC 232D is a special electrode built with a non toxic material, open junction and thread for stainless steel blade. The replaceable penetration blade allows meat measurement on both the surface and internally.



## HI 84429 Titratable Acids mini Titrator and pH Meter

*Perform a complete analysis in one compact unit*

- Performs the phenophalein 8.3 pH titration for lactic acid and measures the pH of your dairy/wheny.
- Supplied with a pre-programmed analysis method
- Datalogging capabilities



## HI 221 pH Bench Meter

*Perform a complete analysis in one compact unit*

- Ideal for pH analysis and for performing manual titrations
- Log and transfer your results to a computer
- Calibration Check™ notifies you when the electrode needs to be replaced

### Cheese pH

American	4.98
Cheddar	5.90
Cottage	4.75 - 5.02
Cream Cheese	4.10 - 4.79
Cheese Dip	5.80
Parmesan	5.20 - 5.30
Swiss Gruyere	5.68 - 6.62

### Milk pH

Cow's Milk	6.40 - 6.80
Acidophilus	4.09 - 4.25
Condensed Milk	6.33
Evaporated	5.90 - 6.30
Goat's Milk	6.48

### Meat pH

Ham	5.9 - 6.1
Lamb	5.4 - 6.7
Pork	5.3 - 6.9
Veal	6.0
Ground Beef	5.1 - 6.2

### Soup pH

Broccoli & Cheese (condensed)	5.60
Chicken Broth	5.80
Cream of Celery (condensed)	6.20
Cream of Mushroom (condensed)	6.00-6.20
Cream Style Corn (condensed)	5.70-5.80
Minestrone (condensed)	5.40
New England Clam Chowder (condensed)	6.00



## Cooking Temperature for Meats

180°F	Whole Poultry
170°F	Poultry Breast, Well Done Meats
165°F	Stuffing, Ground Poultry, Reheated Leftovers
160°F	Meats - Medium, Raw Eggs, Egg Dishes, Pork & Ground Meats

## Cooking and Storage Temperatures

145°F	Medium-rare Beef Steaks, Roasts, Veal, Lamb
140°F	Hot Foods
40°F	Refrigerator Temperatures
0°F	Freezer Temperatures
40°-140°F	Danger Zone for Bacterial Growth

## General Info

To kill most harmful germs, high food temperatures (165°F to 212°F) can be achieved by boiling, baking, frying and roasting.

Refrigerator temperature should be at 40°F (5°C) or lower.

Freezer temperature should be at 0°F (-18°C) or lower.

Defrost food in the refrigerator, in cold water, or in the microwave.

As 32°F is approached, ice crystals can begin to form and lower the quality of foods such as raw fruits, vegetables and eggs. A refrigerator thermometer will help determine whether food is too close to this temperature.

## HI 935007 HACCP Approved Thermometer

*Thermometer featuring a Direct K-type Probe*

- Waterproof
- Low battery warning
- Optional rubber boot can be used for maximum impact protection



HI 710008 Orange Rubber Boot  
HI 710007 Blue Rubber Boot



## HI 141 Series Temperature Dataloggers

*Waterproof Dataloggers Available with Internal and/or External Sensors*

- Dual-level LCD with HI and LO Temperature Values
- Set logging intervals between 1 second and 24 hours
- HI/LO Alarms with # of samples exceeded on display
- PC Compatible with optional HI 141001 infrared transmitter and HI 141000 Window®s compatible software



## HI 98804 Printing and Logging Thermometer

*K, J, T-type Thermocouple Thermometer with Computer Compatibility*

- Dual-level LCD with HI and LO Temperature Values
- Set logging intervals between 1 second and 24 hours
- HI/LO Alarms with # of samples exceeded on display
- PC Compatible with optional HI 141001 infrared transmitter and HI 141000 Window®s compatible software



## Checktemp® 4 Temperature Tester

*HI 151-02 Checktemp® 4 features a Folding, Stainless Steel Probe and CAL CHECK™*

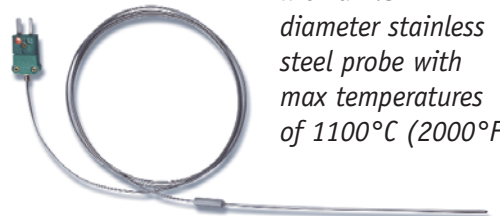
- Probe can penetrate semi-frozen and semi-solid foods
- When turning on, it automatically performs a calibration test (CAL CHECK™)
- Auto-off and conveniently stores away



## HI 766Z

*Temperature Probe that Meets FDA CODE 4-302.12 Criteria*

- Designed specifically with a 1.5 mm diameter stainless steel probe with max temperatures of 1100°C (2000°F)



**NIST traceable certification is available on all HANNA thermometers.**



## HI 83099 COD Kit

Measure 36 Parameters and Chemical Oxygen Demand

- Available with reagents
- Operate in 3 different COD ranges
- RS232 serial port for computer compatibility



## HI 98186 DO/BOD Portable Meter

Measure Dissolved Oxygen and Biochemical Oxygen Demand Featuring a Backlit, Graphic LCD Display

- USB port for PC connectivity
- Salinity, pressure and temperature compensation
- Polarographic probe with built-in temperature sensor on a 13.1' cable

### Inductive Charger

Batteries can be recharged by simply placing the meter in the cradle for a few hours. The cradle can be plugged into a wall socket or an automobile's 12V accessory outlet.



## PCA 330 Chlorine Analyzer

Measure pH, ORP and Free/Total Chlorine of Influent/Effluent Water

- Datalogging capabilities and PC compatible
- Utilizes EPA approved method for chlorine control
- Backlit LCD



## HI 504/710/mV 600 In-line Controllers

Measure pH, ORP and Conductivity with these Panel-mount Controllers

- Ideal for pH analysis and for performing manual titrations
- Log and transfer your results to computer
- Calibration Check™ notifies you when the electrode needs to be replaced

## Water/Wastewater

COD measures the oxygen demand of bio-gradable pollutants plus the oxygen demand of non-biodegradable oxidized pollutants.

BOD measures the oxygen demand of biodegradable pollutants.

Wastewater sewage contains 99.9% water and 0.1% solids.

Contaminants of food-processing wastewater, particularly containing meat, poultry and seafood-processing are classified as pathogenic organisms.

Not until 19th century London did the development of sewers embark, beginning the solution to public health problems created by unsanitary conditions.

Each day, several million liters of wastewater flow through a typical wastewater plant. That is 50 to 100 gallons per person using the system.

The function of a treatment plant is to speed up the process by which water purifies itself. The treated water is then disinfected before being put back into the rivers and streams.

Providing quality instrumentation to the food and dairy industry.

FOR MORE INFORMATION OR FOR A DISTRIBUTOR IN YOUR AREA:

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