

# WIRELESS AND ELECTRONIC INSTRUMENTS

1. CHARGING SYSTEMS

2. GAUGES

3. RECOVERY MACHINES

4. VACUUM PUMP SYSTEMS

5. VACUUM AND CHARGING HOSES

6. HOSE ADAPTERS, VALVES & PARTS

7. WIRELESS AND ELECTRONIC INSTRUMENTS

8. LEAK DETECTORS AND MONITORS

9. HEATING INSTRUMENTS

10. SYSTEM TOOLS

7.1





## Wireless and Electronic Instruments

Convenient wireless measurements for complete HVAC/R diagnostics.



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**YJACK™ PROBES & P51-TITAN MANIFOLD - SEE CHARGING SYSTEM & DIAGNOSTIC TOOLS**

## WIRELESS REFRIGERANT CHARGING SCALE



### Convenient Wireless Measurements!

With a 220 lb. capacity, large platform and wireless Bluetooth® communication, this accurate scale makes refrigerant charge measurements fast and easy. Just connect with any smart device and you are ready to go...with .05% accuracy and 0.2 oz. resolution, service technicians can count on precision measurements every time. Save the charging measurements to your smart device, and you have a permanent record for that installation or service call.

#### Features and Benefits

- Low Energy Bluetooth® communication
- Lightweight, durable design
- Stability control for accurate measurements
- 220 lb. (100kg) capacity
- +/- 0.05% accuracy & 0.2 oz. resolution
- Overload protection
- Oversized platform (12 in./300mm)
- Integrated handle
- Carrying case included
- 9V battery included
- One-year warranty



The Wireless Refrigerant Scale 68864 is controlled and operated with any Smart Device via Bluetooth® and the YJACK VIEW™ app.

#### READINGS SCREEN OVERVIEW

#### YJACK VIEW™ READINGS SCREEN OVERVIEW

- Readings screen will display the scale weight and will also display the weight change and elapsed time since the last set
- Both readings can be set/reset by pressing on the corresponding box
- Weights are displayed as lb./oz. or kg



#### Specifications

Weight Capacity:	220 lb. / 100 kg
Overload Protection:	Yes
Measurement Units:	Pounds and ounces (lb & oz) or kilograms (kg)
Reading Accuracy:	0.05% of reading
Reading Resolution:	5g
Operating Temperature:	32°F - 122°F (0°C - 50°C)
Scale Platform Diameter:	11.8 in (300mm)
Scale Weight:	6.4 lb. (2.9 kg)
Power:	9V battery (included)
Battery Life:	40+ hours
App OS Compatibility:	iOS or Android
Bluetooth® Technology:	Bluetooth® Low Energy (BLE)

UPC#	Description
68864	Wireless refrigerant scale, 220 lb.

## REFRIGERANT CHARGING SCALE



### *Accurate, compact and economical!*

With a 220 lb. capacity and solid accuracy, this compact YELLOW JACKET® charging scale can handle the job, no matter what the size. Service technicians can count on precise information while on the job with 0.05% accuracy and 0.17 oz. resolution.

#### Features and Benefits

- Compact and lightweight
- Rugged, low profile design
- Maximum weight: 220 lb. (100 kg)
- Large, backlit LCD
- Control module with six foot cord stores under the scale when not in use
- Stability indicator shows when the scale is ready to take a reading
- Over-range indicator
- Auto power off
- Long battery life – 40 hours continuous battery life
- Battery life indicator
- Carrying case with storage pouch and shoulder strap included

#### Specifications

Weight Capacity:	220 lb. / 100 kg
Resolution:	0.17 oz. / 0.011 lb. / 5g
Accuracy:	±0.05% of reading + 10g
Display:	05" (1.27 cm) LCD (7-segment)
Readout Options:	Lbs. / oz. / kg
Overall Size:	10.6" x 10.6" x 2.9" (27.1 cm x 27.1 cm x 7.4 cm)
Overall Weight:	8 lbs. (3.6 kg)
Battery Type:	5 x 1.5V AAA alkaline batteries
Battery Life:	40 hours continuous
Warranty:	1 year
Operating Temperature:	14° F to 104° F (-10° C to 40° C)
Temperature Fluctuation Range:	41° F / hr. (5° C)
Storage Temperature:	5° F to 122° F (-15° C to 50° C)
Relative Humidity:	50 - 85%

### *Control module stores inside the platform when not in use.*

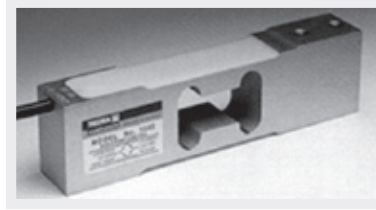


UPC#	Description
68862	220 lb. charging scale with bag

## DIGITAL ELECTRONIC CHARGING SCALES


Electronic charging scales show the progress of the charge as it's happening, indicating when to close the valves and stop the charge. Works with any refrigerant in any system.

- Calibration standards traceable to NIST
- Removable control module on retractable 5' coiled cord
- Mechanical overload protection and "OL" alert on LCD
- Industrial grade circuitry for long life performance
- Minus (-) reading shows weight removed from the platform
- Single point load cell strain gauge for long-term stability and accuracy

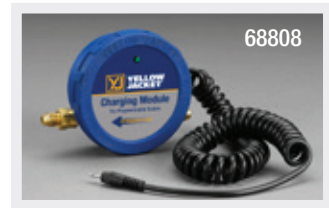


Full bridge configuration with four strain gauges for accuracy.

Programmable electronic charging scales have added capabilities for automated, faster and more economical charging. Simply program the charging weight and the valve will close automatically when the charge is complete.

- Mesh filter in charging module protects solenoid valve from debris
- Low flow triggers automatic hold to extend solenoid life
- Schrader valve prevents backflow through solenoid
- Charging accuracy is equal to scale accuracy +/- 0.25 oz.
- Solenoid valve with 400 psi maximum operating pressure differential (MOPD) allows metering broad range of refrigerants
- Made in the USA 

Convert standard 68802 and 68800 scales to programmable with upgrade kits 68804 and 68805. Each kit includes a charging module, power pack, instruction manual and larger carrying case to hold all parts.



### Specifications

Resolution: 0.1 oz./0.01 lb./0.01 kg  
 Display: Sealed LCD with high resolution 0.5" characters  
 Keypad: Moisture resistant membrane keypad with tactile metal domes  
 Operating temperature range: 32° to 122°F (0° to 50°C)  
 Storage temperature range: -4° to 158°F (-20° to 70°C)  
 Power: 9V battery, battery life approximately 25 hours

### Specifications: 110 lbs. (50 kg) scale

Platform size: 9" x 9" (228 mm x 228 mm)  
 Case size: 15.5" x 12.25" x 3.25" (394 mm x 311 mm x 83 mm)  
 Accuracy: ± 0.5 oz./ ± 0.03 lb./ ± 0.015 kg or 0.1% of reading, whichever is greater  
 Total unit weight: 9 lbs. (4.1 kg)

### Specifications: 220 lbs. (100 kg) scale

Platform size: 11.3" x 11.3" (287 mm x 287 mm)  
 Case size: 18" x 13" x 4.25" (457 mm x 330 mm x 108 mm)  
 Accuracy: ± 1.0 oz./ ± 0.06 lb./ ± 0.03 kg or 0.1% of reading, whichever is greater  
 Total unit weight: 12 lbs. (5.4 kg)

UPC#	Description
68802	Electronic charging scale 110 lbs. (50 kg)
68812	Electronic charging scale 220 lbs. (100 kg)
68803	Programmable electronic charging scale 110 lbs. (50 kg)
68813	Programmable electronic charging scale 220 lbs. (100 kg)
68800	Metric electronic charging scale 50 kg (110 lbs.)
68810	Metric electronic charging scale 100 kg (220 lbs.)
68801	Metric programmable charging scale 50 kg (110 lbs.)
68811	Metric programmable charging scale 100 kg (220 lbs.)
68804	115V Upgrade kit
68805	230V Upgrade kit
68806	115V Adapter
68807	230V Adapter
68818	230V Adapter (UK)
68835	Replacement battery cover (black)
69089	Replacement battery cover (blue)
68808	Charging module



Model 68802 – 110 lbs. (50 kg)  
9" x 9" (228 mm x 228 mm)

Model 68812 – 220 lbs. (100 kg)  
11.3" x 11.3" (287 mm x 287 mm)

# MANTOOTH® WIRELESS VACUUM GAUGE AND P/T GAUGE COMBINATION



The YELLOW JACKET® ManTooth®-PTV (67023) shown above provides vacuum and high- and low-side P/T readings. This full set includes dual non-tethered pressure/temperature gauges, two wired temperature clamps, and one interchangeable vacuum gauge. The single ManTooth® PTV (67021) can be combined with an existing ManTooth® P/T device (67001) for adding wireless vacuum capability and/or expanding it to a full system analysis tool. Simply update your ManTooth® P/T app to version 2.0, connect to the 67020 hardware, and you're ready to go!

To enable mounting on 5/16" systems, add coupler 19221 (90°) or 19121 (straight).



### Product Features:

- Interchangeable/removable vacuum gauge
- Easy-to-clean vacuum sensor
- Built-in Schrader cores for easy refrigerant charging
- Operates with and without hoses attached
- Two year warranty
- High impact glass reinforced housing
- Rechargeable LiPo battery for long battery life
- Robust/rugged vacuum sensor
- Integral magnet for mounting on framework
- Integrated rubber side grip for easy handling

### App Features:

- Available in English, French, Spanish, Dutch, and German.
- Data logging to record and document values during servicing
- Improved connectivity and reconnect process if signal is lost
- Ability to download logged data for graphing in Excel
- For iOS and Android devices
- Backwards compatible with existing ManTooth® Devices (excluding vacuum gauge)

UPC#	Description
67020	ManTooth®-V (Vacuum only) with side grip
67021	ManTooth®-PTV Single with side grip
67023	ManTooth®-PTV Dual with side grip
69030	Vacuum sensor cleaning kit

UPC#	Replacement Parts
67044	Vacuum sensor
67012	USB cord
67014	Carrying case
93394	Tether cap
19020	Hose gaskets (10 pak)
19121	Straight 5/16" Flare quick connect x 1/4" Male coupler
19221	90° 5/16" Flare quick connect x 1/4" Male coupler
19302	Valve depressor (10 pak)
19305	Schrader valve (10 pak)

### Pressure/Temperature Specifications

Pressure Sensing Resolution	0.1 psi, 0.1 bar, 1 kPa, 0.001 MPa, 0.01 kg/cm <sup>2</sup>
Pressure Sensing Accuracy	0.5% of full scale at 25°C; 1% of full scale 55°F to 130°F; 2% of full scale -40°F to 248°F
Working Pressure	0 – 700 psia (48.3 bar)
Proof Pressure	Tolerable pressure without internal damage 1000 psia
Burst Pressure	Tolerable pressure without loss of seal 1500 psia
Temperature Sensor Range (Instrument)	Sensing element: -40°F to 266°F (-40°C to 130°C); Max Cord temp: 176°F (80°C); Max Clamp Temp: 203°F (95°C)
Temperature Display Resolution	0.1°F or °C
Temperature Accuracy (Instrument)	±0.2°C (±0.36°F)
Working Temperature	-4°F to 160°F (-20°C to 71°C) Limited by battery
Storage Temperature	-4°F to 160°F (-20°C to 71°C) - for best battery performance do not store at over 100°F (38°C)
Working Humidity	0-95% RH (non-condensing)
IP Class	IP 50
Bluetooth Range	70-90 ft. (Class 1) or 30-40 ft. (Class 2) in most cases (varies depending on the Bluetooth capability of smart device used). Under perfect conditions (clear line of sight and low interference) communications can extend up to 300 feet.
Bluetooth Radio	Class 1 Bluetooth 2.1 Radio
Size and weight	6" long x 1.6" wide x 2.3" thick (15.3 x 4 x 5.8 cm); 0.5 lbs (225 grams)
Superheat and Subcool	Automatically calculated by the ManTooth® App
Max. and Min. Pressures	Displays and records the maximum and minimum pressures
Refrigerant Database	98 NIST refrigerant profiles included; upgradeable
Screenshot Feature	Save pressure and temperature readings from your sessions; automatically organize
Temperature Sensors	Capable of measuring 2 temperatures using high accuracy NTC thermistors
Pressure Transducers	67001/67003 – one pressure transducer; 67002 – two pressure transducers
System Attachment	Very small internal volume minimizes refrigerant loss during system analysis.
Pressure Zeroing	Simple single button zeroing at the start of each session
Elevation Compensation	Enter elevation at the start of the session for effortless psia compensation
Battery	Rechargeable LiPo battery for 10+ hours continuous life

### Vacuum Specifications

Cord Length	Approximately 33"
Magnet Strength	8 lbs. holding force
Operational Temperature Range	10 – 122F 12 – 50C
Calibration	Calibration standards traceable to NIST
Resolution	.1 micron
Warm-Up Time and Response Time	Instant

# MANTOOTH® WIRELESS DIGITAL PRESSURE/TEMPERATURE GAUGE



The YELLOW JACKET® ManTooth® Wireless Digital Pressure/Temperature Gauge provides wireless connection to your smart device so you can test the system without losing refrigerant (no hoses or manifolds necessary)!

The free downloadable ManTooth® RSA app wirelessly calculates and displays the system's actual pressures, temperatures, superheat and subcooling in an easy-to-read color format on your iPhone®, iPad® or Android™ device.

## Additional Features:

- Built-in Schrader ports to easily adjust refrigerant charge
- Range up to 400' (unobstructed)
- YELLOW JACKET® ManTooth® RSA app (free download)
- Two-year warranty
- Screenshot feature allows you to save pressure and temperature readings from your sessions which can be automatically organized by location and unit being serviced
- Share screenshots via e-mail right from your phone
- Easily track and store service history
- Rechargeable lithium polymer battery with 10 hours battery life

The ManTooth® Single Pressure Wireless Digital P/T Gauge includes a single hardware device and clamp. Two single units can be purchased in a case by ordering Part #67003.

For dual pressure readings, use two of the 67001 ManTooth® single pressure gauges or the 67002 ManTooth® Dual Pressure Unit which comes with a P/T module, tether unit and two temperature probe clamps. This unit also includes a convenient carrying case which can be purchased separately for the single pressure unit.

UPC#	Description
67001	ManTooth® Single Pressure Gauge (includes P/T Module with boot, temperature probe clamp, and USB cable)
67002	ManTooth® Dual Pressure Gauge Set (includes P/T Module and tether unit with boots, two temperature probe clamps, and USB cable in case)
67003	Two (2) ManTooth® Single Pressure Gauges (includes two P/T Modules with boots, two temperature probe clamps, and two USB cables in case)

UPC#	Replacement Parts
67010	Clamp
67012	USB Cord
67013	Blue boot
67014	Carrying case
93394	Tether cap
19020	Hose gaskets (10 pak)
19302	Valve depressor (10 pak)
19305	Schrader valve (10 pak)

## Specifications:

Pressure Sensing Resolution	0.1 psi, 0.1 bar, 1 kPa, 0.001 MPa, 0.01 kg/cm <sup>2</sup>
Pressure Sensing Accuracy	0.5% of full scale at 25°C; 1% of full scale 55°F to 130°F; 2% of full scale -40°F to 248°F
Working Pressure	0 – 700 psia (48.3 bar)
Proof Pressure	Tolerable pressure without internal damage 1000 psia
Burst Pressure	Tolerable pressure without loss of seal 1500 psia
Temperature Sensor Range (Instrument)	Sensing element: -40°F to 266°F (-40°C to 130°C) Max Cord temp: 176°F (80°C); Max Clamp Temp: 203°F (95°C)
Temperature Display Resolution	0.1°F or °C
Temperature Accuracy (Instrument)	±0.2°C (±0.36°F)
Working Temperature	-4°F to 160°F (-20°C to 71°C)
Storage Temperature	-4°F to 160°F (-20°C to 71°C)
Working Humidity	0-95% RH (non-condensing)
IP Class	IP 50
Battery Life	10+ hours continuous
Range	70-90 ft. (Class 1) or 30-40 ft. (Class 2) in most cases (varies depending on the Bluetooth capability of smart device used). Under perfect conditions (clear line of sight and low interference) communications can extend up to 300 feet.
Bluetooth Radio	Class 1 Bluetooth 2.1 Radio
Size	6" long x 1.6" wide x 2.3" thick (15.3 x 4 x 5.8 cm)
Weight	0.5 lbs (225 grams)
Superheat and Subcool	Automatically calculated by the ManTooth App
Max. and Min. Pressures	Displays and records the max and min pressures
Refrigerant Database	126 NIST refrigerant profiles included; upgradeable
Screenshot Feature	Save pressure and temperature readings from your sessions which can be automatically organized by location and serviced unit
Temperature Sensors	Capable of measuring 2 temperatures using high accuracy NTC thermistors
Pressure Transducers	67001/67003 – one 67002 – two
System Attachment	Very small internal volume minimizes refrigerant loss during system analysis.
Pressure Zeroing	Simple single button zeroing at the start of each session
Elevation Compensation	Enter at start of session for effortless psia compensation
Battery	Rechargeable LiPo battery



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## OMNI™ DIGITAL VACUUM GAUGE



The YELLOW JACKET® OMNI™ Digital Vacuum Gauge is an easy-to-use, compact vacuum gauge that is loaded with features for the price. And it's rugged, too. Made with high impact, glass reinforced housing, it survives moisture and accidental drops or attachment to a high pressure line. The easy-to-clean vacuum sensor handles 450 psi positive pressure and reads several units of vacuum (microns, millibar, Torr and Pascal).

- Visual signal when target vacuum level is reached
- Electronic paper display for clear visibility – even in direct sunlight
- Rich and intuitive user interface – turn it on and it is ready to use with default settings
- 45° bend for fitting (1/4" or 5/16")
- Automatic power down and time out
- Power savings - multiple time-out selections
- Low battery indicator and automatic power-down when inactive
- Adapter fittings available
- Made in the USA 

*Compact, easy-to-use, and more unique features than any other unit on the market.*

### Specifications

Vacuum Reading Resolution:	1 micron (from 1,000 to 5 microns) 10 microns (from 10,000 to 1,000 microns) 100 microns (from 99,999 to 10,000 microns)
Display Vacuum Measurement Accuracy:	+/- 20% of reading (from 10,000 to 25 microns)
Vacuum Reading Range:	5 to 99,999 Microns (133.3 mBar, 100 Torr, 13,333 Pa); Progress bar-graph from Atmosphere (ATM) to 99,999 Microns
Proof Pressure:	450 psi
Working Temperature:	32°F to 104°F (0°C to 40°C)
Storage Temperature:	-4°F to 140°F (-20°C to 60°C)
Working Humidity:	0-95% RH (non-condensing)
Class:	IP-50
Battery Life:	150+ hours continuous
Battery:	(2) AAA batteries (included)
Size:	6" long x 1.6" wide x 1.6" thick including fitting (15.3 x 4 x 4 cm)
Weight:	0.39 lb (175 grams)
Warranty:	One year

UPC#	Description
69020	OMNI™ Digital Vacuum Gauge with 1/4" Coupler
69021	OMNI™ Digital Vacuum Gauge with 5/16" Coupler



## VACUUM SENSOR CLEANING KIT

Follow cleaning procedure for these YELLOW JACKET® vacuum gauges: 69020 series OMNI™, 67044 series used with P51 digital manifold and Mantooth gauges or 69086 digital vacuum gauge.

Made in the USA 

UPC#	Description
69030	Vacuum Sensor Cleaning Kit






## DIGITAL VACUUM GAUGE

### Seven units of vacuum for confidence

This easy-to-use gauge shows that air and moisture have been removed from the system. A simple push of a button changes the display readout between 7 units of measurement. **Each displays from atmosphere to 10 microns (bargraph indication above 25000 microns) of vacuum to let you know that your vacuum pump is clean and performing properly.** If the sensor gets dirty, simply plug a new sensor into the gauge, run through a quick calibration process and be back on the job within minutes.



This product is protected by one or more of U.S. Patent Number: 6,779,350; 6,832,491; 7,073,346; 7,310,965; and 7,428,822.

- Unique patented thermal conductivity sensor automatically compensates for temperature
- Replaceable, cleanable, plug-in sensor (Part #69087) handles 450 psi positive pressure
- Displays seven different units of vacuum (microns, milliTorr, Torr, millimeters of mercury, millibar, kiloPascal and Pascal)
- 12" coiled sensor cord stretches to 24" for easy reach, connectivity and readability of display
- Low battery indicator
- Automatic shut-off after 20 minutes
- Calibration standards traceable to NIST
- 32° to 122°F (0° to 50°C) operating temperature range
- 14 oz. (392 g) with battery
- Approximately 25 hours continuous battery life
- Accuracy  $\pm 20\%$  of reading
- Made in the USA 

UPC#	Description
69086	Hand-held vacuum gauge with fabric carry pouch
69087	Replacement sensor for older models without detachable cords
69088	Replacement cable for original version - not detachable
40819	Replacement cable for new version - detachable
69101	Replacement sensor and cord assembly
69091	Replacement fabric pouch
69030	Vacuum Sensor Cleaning Kit

## SUPEREVAC® LCD VACUUM GAUGE

### Full range from atmosphere to 1 micron

The SUPEREVAC® LCD vacuum gauge combines thermocouple sensor technology with advanced electronics for precise readings and repeatability not found with thermistor sensors or analog meters.

Thermocouple technology has long been proven in laboratory and precision industrial instrumentation for sensing the deep vacuum range. Thermocouple sensors are factory calibrated and exhibit few of the electronic variances of thermistor sensors found in many other electronic gauges. Durable molded case with storage for sensor, cable and brass connector.



Specifications	
Response time:	3 seconds
Calibration:	Automatic
Warm up:	3 seconds
Sensor cable:	5.5' (167 cm) coiled
Sensor connection:	1/4" Male flare
Maximum pressure:	To avoid sensor damage, do not exceed 5 psig
Operating temperature range:	32° to 120°F (0° to 49°C)
Display:	0.5" LCD with battery check
Automatic shut-off:	Yes
Power:	D cell battery, 70 hours continuous battery life
Dimensions:	9" x 12.25" x 2.37" (230 mm x 310 mm x 60 mm)
Accuracy:	± 20% of reading from 10 to 10,000 microns
UPC#	Description
69075	SUPEREVAC® LCD vacuum gauge full range complete in case
69067	Optional ball valve to add to sensor 1/8" NPT Female x 1/4" Female flare
69071	Brass connector 1/4" Female flare x 1/4" Female flare
69073	Replacement sensor for 69070, 69075
19110	Optional coupler to add to sensor 1/8" NPT Female x 1/4" Female flare
69058	Replacement cord

#### Thermocouple sensor features:

- No adjustments or warm-up. Stays calibrated after on/off switching and long evacuations
- Automatic battery compensation
- Automatic ambient temperature compensation
- Replacement sensor requires no calibration

#### LCD gauge features:

- Automatic off 20 minutes after power up and no change
- Normal handling and jarring will not affect the LCD reading
- Case protects electronic circuitry and sensor
- Calibration standards traceable to NIST
- Precision circuitry controls sensor and translates sensor input into micron readings
- Made in the USA

## DIGITAL LCD ECONOMY VACUUM GAUGE



This product is protected by one or more of U.S. Patent Number: 6,779,350; 6,832,491; 7,073,346; 7,310,965; and 7,428,822.

The digital LCD economy vacuum gauge indicates air and moisture have been removed from the system. Track down the 14 level bargraph from atmosphere to 25 microns to know that the system is clean and the vacuum pump is performing properly. Packaged complete with 9V alkaline battery and hanging hook.

- Unique thermal conductivity sensor automatically compensates for temperature with no calibration
- Simple On/Off controls
- Easy-to-clean sensor handles 450 psi positive pressure
- Rugged contractor-grade construction with tough ABS housing and solid state circuitry for accuracy
- Automatic battery saver shuts gauge off after 20 minutes with no reading changes
- Low battery indicator
- Calibration standards traceable to NIST
- Patented technology
- Made in the USA

To keep the 69080 vacuum gauge accurate, it is best to avoid oil contamination. Keep the sensor vertical whenever possible and connect the gauge directly to the system, away from the pump.

UPC#	Description
69080	Digital LCD vacuum gauge with battery, hook and pouch
69081	Replacement soft-sided protective case
69079	Replacement battery door and screw
69095	Tee fitting

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## POCKET THERMOMETERS

1" and 1-3/8" dial thermometers are adjustable with a 5" stainless steel stem. Colored sheath with pocket clip.

- Individually calibrated
- Shock resistant



UPC#	Description
69251	1" Dial 0° to 220°F (12 pak)
69252	1" Dial 40° to 160°F (12 pak)
69253	1" Dial 50° to 550°F (12 pak)
69255	1-3/8" Dial -40° to 160°F (-40° to 70°C) (12 pak)
69256	1-3/8" Dial 0° to 220°F (-10° to 110°C) (12 pak)
69265	1" Dial 0° to 70°C (12 pak)



## POCKET DIGITAL THERMOMETER



Digital head rotates 180° for easy reading.

- On/off button
- Auto off after 10 minutes
- Reading updates every second
- 5" (125 mm) stem

UPC#	Description
69107	Digital thermometer -58° to 302°F (-50° to 150°C)
69250	69107 display (12 pak)
69110	Battery

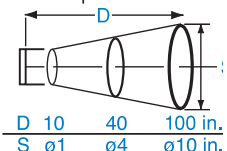
## PISTOL-GRIP INFRARED THERMOMETER

With wide measurement of -40° to 932°F, this easy-to-use tool is the effective choice for high or low temperature and refrigeration applications. For accuracy and resolution, the focal point is a tight 10:1 ratio with laser sighting.

- Selectable 3-point emissivity for simple set-up
- Backlight for dark area use
- °F/°C switchable
- ± 2% or 2°C accuracy
- 0.1°F resolution at -40° to 212°F (-40° to 100°C)
- Fast response time of 500 msec



D = Distance to object  
 S = Spot diameter



UPC#	Description
69228	Pistol-grip infrared thermometer

## DIGITAL THERMOMETER PROBES

### Differential and single

#### Single Probe "K" type:

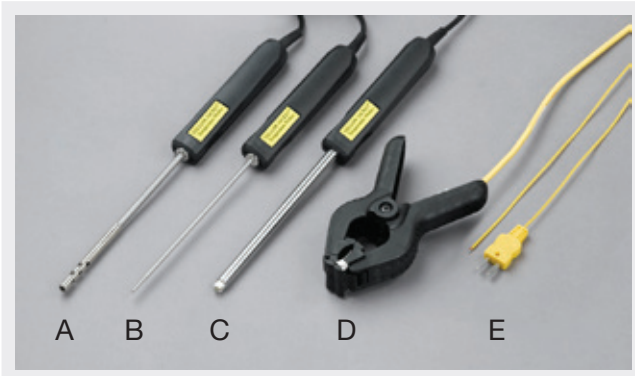
- Single "K" type input
- °F/°C switchable
- Maximum and minimum hold
- Low battery indicator
- Power off after 30 minutes

#### Differential "K" type:

- Dual "K" type thermocouple inputs
- T1, T2 or T1-T2 differential readings
- Resolution 1°

#### Specifications

Temperature range: -58° to 1999°F (-50° to 1300°C)  
 Resolution: 0.1 or 1°  
 Display: LCD 5/8" (16 mm)  
 Operating temperature range: 32° to 120°F (0 to 49°C)  
 Storage temperature range: -20° to 130°F (-29 to 54°C)  
 Power: 9V, battery life approximately 200 hours  
 Dimensions: 7.2" x 2.75" x 1.6" (180 mm x 70 mm x 40 mm)  
 Accuracy: -58° to 1800°F ± (0.3% of reading + 2°F); -50° to 982°C ± (0.3% of reading + 1°C)



UPC#	Description	Maximum temperature	Length	Response time (sec.)
69215	Type "K" air probe (A)	1112°F (600°C)	4 ft. (1.21 m)	5
69217	Type "K" 1.375" clamp-on probe (D)	248°F (120°C)	10 ft. (3.05 m)	3
69218	Type "K" general purpose probe (E)	500°F (260°C)	3 ft. (0.91 m)	3
69220	Type "K" surface probe (C)	1650°F (900°C)	4 ft. (1.21 m)	3
69222	Type "K" puncture probe (B)	1112°F (600°C)	4 ft. (1.21 m)	12

## ANEMOMETER



This hand-held instrument reads both air velocity and temperature simultaneously when balancing air conditioning/heating ventilation systems.

UPC#	Description
68915	Anemometer kit
68916	Replacement 2.75" (70 mm) diameter probe assembly

- Microprocessor controller
- Calculates cfm air volume
- Records minimum and maximum readings
- Averages air velocity
- Display "hold" button freezes LCD reading
- °F/°C switchable
- Auto off after 20 minutes
- RS232 output

#### Specifications

Air flow ranges: 125 – 4900 ft/min  
 Resolution: 1 ft/min and 0.01 m/sec.  
 Accuracy: ±2%  
 Temperature: 14° to 122°F (-10° to 50°C)  
 Resolution: 0.01°F and 0.1°C  
 Accuracy: ±1.0°F (±0.6°C)  
 Power: 9V battery, battery life approximately 100 hours  
 Fan diameter: 2-7/8" (70 mm)

## DIGI-ALARM THERMOMETER



*Extended reach stainless steel probe.*

This compact unit measures from -58° to 392°F (-50° to 200°C) and triggers an alarm at the high and low programmed temperatures.

- No calibration
- °F/°C switchable
- Data hold function
- Key tone for operation confirmation
- Maximum/minimum temperature memory
- Foldaway stand
- Automatic self test after battery installation

#### Specifications

Measurement range: -50 to 200°C / -58 to 392°F  
 Accuracy: ±1°C between -19.9 to 119.9°C  
 ±2°C between 120 to 199.9°C  
 otherwise ±3°C  
 ±1.8°F between -3.8 to 183.8°F  
 ±3.6°F between 248 to 391.8°F  
 otherwise ±5.4°F  
 Display resolution: 0.1° over full range  
 Alarm resolution: 1° over full range  
 Sampling rate: 1 second  
 Battery: Requires one 1.5 volt size AAA/UM4 or equivalent (included)  
 Ambient temperature: 0 to 50°C / 32 to 122°F

UPC#	Description
69239	Digi-alarm thermometer