Table of Contents

See our Full Line Catalog (Edition 18) for our complete product offering.

Supco

Index

Digital Multimeters

SUPCO's full line of Digital Multimeters (DMM's) provide electrical measurement needs for all of your applications.

- Thermocouple Voltages in Furnaces
- AC/DC Line and Control Voltages
- Flame Safeguard Current (DM25 0.01 resolution)
- Frequency (Hz) in systems and panels (DM40)
- Continuity Checks

- Thermostat Heat Anticipator Current
- Heating Element Resistance
- Run and Start Capacitor verification
- Motor Winding Resistance

DM20
Digital Multimeter

New!

The DM20 Digital Multimeter (DMM) provides general electrical measurements for most applications. It's sturdy design and protective rubber boot provide reliable measurements to meet your needs.

Features/Benefits
- 750 Volts AC
- 1000 Volts DC
- 20 MegaOhms Resistance
- Continuity
- 10 Amps AC
- 10 Amps DC
- Large Display
- Data Hold
- 3 Year Warranty

DM25
Digital Multimeter
with Capacitance

New!

The DM25 Digital Multimeter (DMM) provides electrical measurements for your HVAC applications, including Capacitance and 0.01 DC μ Amps resolution for your flame safeguard measurements. It's sturdy design and protective rubber boot provide reliable measurements to meet your needs.

Features/Benefits
- 750 Volts AC
- 1000 Volts DC
- 40 MegaOhms Resistance
- Continuity
- 10 Amps AC
- 10 Amps DC
- 20,000 μ F Capacitance
- .01 μ mA DC Resolution
- Data Hold
- 3 Year Warranty

DM40
True rms
Digital Multimeter

New!

The DM40 True rms Digital Multimeter (DMM) provides the most accurate electrical measurements for your HVAC applications. It's sturdy design and protective rubber boot provide reliable True rms measurements to meet your needs.

Features/Benefits
- AC/DC Volts
- AC/DC Amps
- Resistance
- Continuity
- Capacitance
- Triple Readout Display
- 4000 Count Display
- Backlight for Display
- Sleep Mode
- Min/Max Record
- Relative Mode
- 3 Year Warranty

DM10/DM10T
Economy Digital Multimeters
with Temperature (DM10T)

New!

The DM10 and DM10T Digital Multimeters provide an economical solution to your everyday electrical and temperature (DM10T) measurement needs.

Features/Benefits
- 1000 Volts DC
- Continuity
- 2M W Resistance
- 10 Amps DC
- 750 Volts AC
- Temperature (DM10T)

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New! CP50
Digital Current Probe

The CP50 Digital Current Probe provides current measurements for most applications. It also measures other general electrical parameters.

Applications
- HVAC Equipment consumption
- Branch circuit current
- AC Line and Control Voltages
- Continuity Checks

Features/Benefits
- 400 Amps AC
- 4 K-Ohms Resistance
- 600 Volts AC
- 4 Volts DC
- Peak Hold
- Data Hold
- 1 1/8" Jaw Capacity
- Continuity
- 3 Year Warranty

New! CP070
Open Jaw Multi Probe

Measures and displays current and voltage simultaneously. Quick and easy current measurement with open jaw design.

Features/Benefits
- Simultaneously measures up to 200 Amps AC Current and one of the following:
    - 600V max AC or DC Voltage
    - 40 MegaOhm max Resistance
    - 200uF Capacitance
    - up to 1 kHz Frequency
- Two LCD displays
- Open Jaw Current Measurement
- 3 year Warranty

Optional Accessories

New!

New!

New!

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CPA20
AC Current Probe Adapter

The CPA20 Current Probe adapter is designed to measure AC current. It can be used with most digital multimeters having a 20mA and 200mA or 40mA and 400mA AC range.

Features/Benefits
- Two ranges: 40A and 400 A
- 1 1/8" Jaw capacity
- 4 foot cable length

TPA1
Temperture Adapter

The TPA1 Temperature Adapter can be used with digital multimeters having 200mV or 2V DC ranges and analog multimeters having DCmV ranges up to 300mV DC.

Features/Benefits
- Measures up to 500°F
- Uses K-type thermocouple

TLA
Test Leads
- 1000V AC or DC max
- 10 Amps max

SCDM/SCCP
Soft Deluxe Case

Features/Benefits
- Rugged Cordura Case
- Zippered case
- Sturdy belt loop
- Identification window

Digital Multimeters and Current Probe Accessories

		DM10T	DM20	DM25	DM40	CP50	CPO70
Standard Accessories (Included)							
TLA	Test Leads w/ Alligator Clips		*	*	*	*	
TP10K	Temperature Probe						
FUSE2	2A, 600 V Fuse		*	*			
FUSE10	10A, 600 V Fuse		*	*	*		
9 V Battery		*	*	*	*	*	
FUSEA	0.5A, 600 V Fuse			*	*		
Optional Accessories							
TPA1	Temperature Adapter		*	*	*	*	
CPA20	Current Probe Adapter		*	*			
SCDM	Soft Carrying Case for DMM's		*	*	*		*
SCCP	Soft Case for Current Probes	*				*	

Digital Multimeters and Current Probe Specifications

	DM10/DM10T	DM20	DM25	DM40	CP50	CP070
Volts AC	750	750	750	650	600	600
Volts AC Best Resolution	1 V	0.1 mV	0.1 mV	0.1 mV	1.0 mV	1mV
Volts DC	1000	1000	1000	1000	4	600
Volts DC Best Resolution	0.1 mV	0.1 mV	0.1 mV	0.1 mV	1.0 mV	0.1mV
Amps AC		10	10	10	400	200A
Amps AC Best Resolution		0.1 mA	0.1 mA	0.1 mA	0.01 A	100mA
Amps DC	10	10	10	10		
Amps DC Best Resolution	0.1 mA	0.1 mA	0.01 mA	0.1 mA		
Frequency (Hz)						9.999MHz
Frequency Best Resolution						0.001Hz
Base Accuracy (DC Volts)	± 0.5% ± 2 dgts	± 0.5% ± 2 dgts	± 0.5% ± 1 dgt	± 0.3% ± 2 dgts	± 1.5% ± 4 dgts (AC Amps)	± 1.2% ± 2 dgts ± 3.0% ± 3 dgts (AC Amps)
Resistance max. (Ohms)	2 M	20 M	40 M	40 M	4 K	40M
Continuity	Yes	Yes	Yes	Yes	Yes	Yes
Capacitance			20,000 mF	10,000 mF		200 μF
Capacitance Best Resolution			0.1 mF	0.01 mF		1pF
Temperature	-4°F to 2498°F (DM10T) (-20°C to 1370°C) (DM10T)					
Temperature Accuracy	±3 ± 2 digits					
Display (Count)	2000	2000	4000	4,000 plus bar graph	4,000	
Data Hold		Yes	Yes		Yes	Yes
Peak Hold					Yes	
Sleep Mode				Yes		
Min/Max Record				Yes		
Relative Mode				Yes		
Operating Temp.	32°F to 74°F (0°C to 23°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 114°F (0°C to 40°C)	32°F to 122°F (0°C to 50°C)	14°F to 122°F (-10°C to 50°C)
Storage Temp.		14°F to 122°F (-10°C to 50°C)	14°F to 122°F (-10°C to 50°C)	-4°F to 140°F (-20°C to 60°C)	-4°F to 140°F (-10°C to 60°C)	(-30°C to 60°C)
Relative Humidity	0% to 75% RH	0% to 80% RH	0% to 80% RH	0% to 80% RH	0% to 80% RH	0% to 90% RH
Fuse Protection	mA: 0.2A/250V	mA: 2A/600VAC A: 10mP/600VAC	mA: 2A/600VAC A: 10mP/600VAC	mA: 0.5mP/600VAC A: 10mP/600VAC		
Power Battery Life (Typical)	9 V Battery (included)	9 V Battery (included) 200 hours	9 V Battery (included) 200 hours	9 V Battery (included) 100 hours	9 V Battery (included) 200 Hours	2 AA Batteries (included)
Size (HxLxW)		1.3"x3.4"x7.4" (33mm x 86mm x 187mm)	1.3"x3.4"x7.4" (33mm x 86mm x 187mm)	1.3"x3.4"x7.4" (33mm x 86mm x 187mm)	7.13"X2.63"X1.25"	
Weight		23.3 oz (660g)	23.3 oz (660g)	23.3 oz (660g)	19 oz.	
Warranty		3 Year	3 Year	3 Year	3 Year	

The *New* SUPCO DM25 digital multimeter being used to troubleshoot an electric furnace.

Digital Thermometers

Applications
- Superheat Measurements (T1-T2)(DT22)
- Oven Temperature measurements
- Ambient Temperature measurements
- Surface Temperature measurements
- Food Service
- Measure HVAC and Refrigeration system Temperatures

New!

DT12
Digital Thermometer

The full ranging DT12 Digital Thermometer comes complete with a K-type thermocouple oven clip probe and is housed in a sturdy rubber boot for accurate and reliable temperature measurements.

Features/Benefits
- K-Type Thermocouple Probe with Oven Clip Included
- Range -112°F to 1832°F (-80°C to 1000°C)
- Protective Rubber Boot Included
- Low Battery Indicator
- 3 Year Warranty

New!

DT22
Dual Digital Thermometer

The Dual Input DT22 Digital Thermometer comes complete with two (2) K-type thermo-couples. Providing Temperature Differential Measurement (T1-T2), it is ideal for superheat applications.

Features/Benefits
- Two (2) K-Type Thermocouple Probes Included
- Range -328°F to 2462°F (-200°C to 1350°C)
- Temperature Differential Measurement (T1-T2)
- K-Type and J-Type Thermocouple Selectable
- Min/Max Record
- Data Hold
- Protective Rubber Boot Included
- Auto Shut Off
- Low Battery Indicator
- 3 Year Warranty

DDT2
Digital Differential Thermometer

With it's Dual Display, the DDT2 provides instant measurements for two Temperature points (T1,T2) and their difference (T1-T2). Optional PC Software (DDT2S) allows for analysis of trend data.

Features/Benefits
- Dual K-Type Thermocouple Inputs
- Temperature Differential Measurement (T1-T2)
- Records Up to 8 Min/Max/Avg Measurements
- Relative Function provides instant Temperature Difference between successive measurements
- Dual Display
- Auto-Ranging
- Data Hold
- Auto Power Off
- Vinyl Case Included

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PT100
Digital Pocket Surface Thermometer

MADE IN THE
USA

Applications
- Speedy recovery - reclaim temperature measurement
- Measures evaporator plate and condensing temperatures
- Air inlet, outlet and surrounding air

Features
- Ultra sensitive air and surface reading probe
- Provides fast response—within seconds
- Temperature "HOLD" switch—keeps readings fixed

TPFDA
FDA Approved K-type
Thermocouple Probe

TPFG
Fiberglass Insulated K-type
Thermocouple Probe

TPOC
K-type Thermocouple
Probe with Oven Clip

TPP
K-type Thermocouple
Piercing Probe

TPS
K-type Thermocouple Surface
Probe

Temperature & Humidity Testers

New! *New!*

The THP1 and THP2 provide quick measurement of temperature and humidity for a multitude of applications.

THP1
Thermo-Hygrometer Pen

Features/Benefits
- Measures Temperature & Humidity, Simultaneously
- Dual Display
- Temperature in °F or °C
- Auto Power Off (20 min.)
- RESET Switch
- HOLD Switch
- Belt or Pocket Clip
- Battery Included
- Min/Max Memory

THP2
Thermo-Hygrometer Pen

Features/Benefits
- Measures Temperature & Humidity, Simultaneously
- Dual Display
- Temperature in °F or °C
- Pocket Clip
- Battery Included
- Min/Max Memory

THC200
Thermo-Hygrometer w/ Clock

Features/Benefits
- Table top or wall mount
- Measure Temperature and Humidity Simultaneously
- Real Time Clock
- Set High and Low Alarms for Temperature and Humidity
- Temperature Range: -4°F to 122°F (-20°C to 50°C)
- Humidity Range: 25% to 95%
- °F/C° Switchable

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DSP990
Digital Psychrometer

The DSP990 is a precision temperature & humidity instrument. It provides measurement of Temperature, Humidity, Wet Bulb and Dew Point
- No Water Necessary
- No Twirling
- No Reading Charts

Applications
- Cellophane
- Laboratory
- Textile
- Photographic
- Snowmaking
- Chemical
- Pharmaceuticals
- Paper
- Printing
- Tobacco

Features/Benefits
- Min/Max
- °F/°C Switch
- Reset Button
- Pocket Sized
- One Year Warranty
- Data Hold
- Auto Power Off
- Low Battery Indicator
- Protective Cover

TPM110
Temperature Indicator

A highly reliable, extremely accurate temperature indicator. Custom designed faceplates with your company name or logo are available with quantity orders.

Applications
- Direct replacement for old style 2 1/4″ and 2 1/2″ dial gauges
- Commercial Refrigeration/Freezer Panels
- Hospital/Laboratory Control Panels

Features/Benefits
- Large LCD display
- Easy installation
- Thermocouple wire can be extended to 500'
- Can calibrate in the field

MADE IN THE USA

Model No.		
TPM110	110 VAC	Fahrenheit Model
TPM110C	110 VAC	Celsius Model
TPM220	220 VAC	Fahrenheit Model
TPM220C	220 VAC	Celsius Model
TPM12	12 VAC	Fahrenheit Model
TPM12C	12 VAC	Celsius Model

Specifications

	DT12	DT22	DDT2	PT100	TPM110	THP1	THP2	DSP990	THC200
# of inputs	1	2	2	1	1	1 Temp./1 Hum.	1 Temp./1 Hum.		1 Temp./1 Hum.
Thermo - couple Type	K	K, J	K		J				
Differential		*	*						
Data Hold		*	*	*		*		*	
Min/ Max		*	*			*		*	*
Dual Display			*			*			Triple Display
Auto-Off	*	*	*			*		*	
Temp. Range	-112°F to 2462°F -80°C to 1000°C	K-Type -112°F to 2462°F -80°C to 1000°C J-Type -328°F to 1832°F -200°C to 1000°C	-328°F to 2498°F -200°C to 1370°C	PT100/PT100C -40°F to 199.9°F -40°C to 93.28°C PT100H/PT100HC -40°F to 250°F -40°C to 120°C	-70°F to 199°F -56.67°C to 93.28°C	14°F to 122°F -10°C to 50°C	-4°F to 122°F -20°C to 50°C	-4°F to 122°F -20°C to 50°C	-4°F to 122°F -20°C to 50°C
Temp. Resolution	0.1°F -112°F to 299°F 1°F (300 + °F)	0.1°F -328°F to 999.9°F 1°F (1000 + °F)	0.1°F -200°F to 200°F 1°F otherwise	0.1°F -40°F to 199.9°F 1.0°F (-40° to 250°F)	1.0°F	0.1°F	0.1°F	1.0°F	1.0°F
Temp. Accuracy	±0.5%Rdg +1.8°F (-58°F to 1832°F)	±0.3%Rdg +1.8°F	±0.5%Rdg+2°F	0.2 Surface 1.0 Air	±1°F	±1.8°F	±2°F	±1.8°F	±1.8°F or 1.0°C
Humidity Range						5% to 95% RH	10% to 90% RH	0 to 100% RH	25% to 95% RH
Humidity Resolution						0.1% RH	1% RH	1% RH	1% RH
Humidity Accuracy						±3% for 10% to 90% RH, otherwise ±5%	±5% for 40% to 80% RH, otherwise ±7%	±3% for 10% to 90% RH, otherwise ± 4%	±5% RH
Power	AAA (2) Batteries	9V Alkaline	9V Alkaline	9V Alkaline	120/240V 50/60 Hz	Button cell (1) CR2032	Button cell (1) LR44	AAA (2) Batteries	AA (2) Batteries
Size (HxLxW)	1.8" x 6" x 3"	1.8" x 6" x 3"	7.25" x 2.5" x 1.4"	1.5" x 6.75" x 0.8"	3.38" X 3.38"			6.7" X 1.85" X 0.5"	4.38" X 2.75" X 0.5"
Weight	7.2 oz	7.2 oz	7.4 oz						
Warranty	3 year	3 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year

Temperature Probe Specifications

	TPFDA	TPFG	TPOC with Oven Clip	TPP Piercing	TPS Surface
Thermocouple Type Temp. Range:	K-Type -40°F to 950°F -40°C to 510°C	K-Type -40°F to 950°F -40°C to 510°C	K-Type -40°F to 950°F -40°C to 510°C	K-Type -58°F to 482°F -50°C to 250°C	K-Type -58°F to 1202°F -50°C to 650°C
Subminiature connector	*	*	*	*	*
4' bead tip probe with FDA approved insulation	*				
3.7" heavy duty chisel tip insertion probe with handle and 4' cord			*		
4" heavy duty spring loaded tip surface probe with handle and 4' cord				*	

6

Laser Infrared Thermometers

Laser Infrared Thermometers offer precise, non-contact measurement in a lightweight, handheld instrument. With one hand operation, they are ideal for a wide variety of applications.

Applications
- Refrigeration Systems
- Heating Systems
- Supply and Return Registers
- Circuit Breaker Panels
- Motors/Bearings
- Transformers
- Ducts
- And More

LPT600/LPT260
Easy Temp Laser Thermometer
- 3:1 optical ratio
- 1 button operation
- Carrying case included

LIT8LT *New!*
Low Temperature Laser Infrared Thermometer
- 8:1 optical ratio
- Trigger style
- Backlight
- Low temperature reading to -58°F

LIT8B *New!*
Laser Infrared Thermometer
- 8:1 optical ratio
- Trigger style
- Backlight

LIT8
Laser Infrared Thermometer
- 8:1 optical ratio
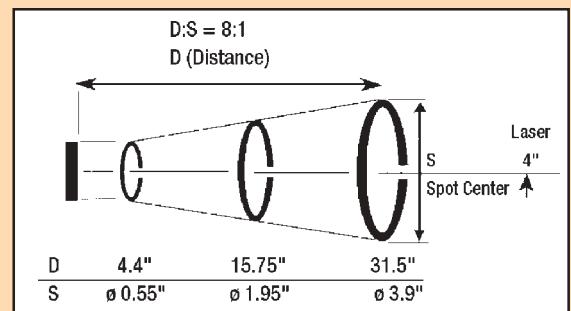- Miniature size
- Carrying case included
- Backlight

	LPT600	LPT260	LIT8B	LIT8	LIT8LT
Temperature Range	0°F to 600°F (-18°C to 315°C)	-67°F to 260°F (-55°C to 125°C)	-4°F to 518°F (-20°C to 270°C)	-4°F to 788°F (-20°C to 420°C)	-58°F to 932°F (-50°C to 500°C)
Resolution	1°F (1°C)		1°F (1°C)	1°F (1°C)	1°F (1°C)
Accuracy	±2% Accuracy ±0.5% of reading, plus one digit repeatability		±2% of reading or 4°F/2°C	±2% of reading or 4°C	±2% of reading or ±2°F/±2°C
Emissivity	0.95 fixed		0.95 fixed	0.95 fixed	0.95 fixed
Distance Factor	D:S =3:1 with a 1" min. target		D:S = Approximately 8:1	D:S = Approximately 8:1	D:S = Approximately 8:1
Sample Rate				1 second	
Display	LCD		LCD with backlight	LCD with backlight	LCD with backlight
Automatic shut off	*		*	*	*
Power Supply	9V Battery (Included)		9V Battery (Included)	9V Battery (Included)	9V Battery (Included)
Weight			5.8 ounces (180g)	6.4 ounces (200g)	5.9 ounces (185g)
Dimensions			6.4" X 3.2" X 2.4" (159mm X 79mm X 57mm)	6.7" X 1.7" X 1.6"	6.4" X 3.2" X 2.4" (159mm X 79mm X 57.2mm)

Application Note:
What is Distance to Spot Ratio (D:S)?

This is the size of the measurement field that a non-contact infrared thermometer uses to provide a temperature reading. The infrared ther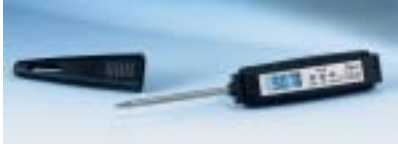mometer averages the temperature of that field to calculate the temperature reading. For example, a D:S ratio of 8:1 means that the measurement field measures approximately 1 foot in diameter when the target is approximately 8 feet away.

D:S = 8:1
D (Distance)
Laser
4"
Spot Center
S

D	4.4"	15.75"	31.5"
S	ø 0.55"	ø 1.95"	ø 3.9"

Pocket Digital Thermometers

Applications
- Refrigerators/Freezers
- Food Processing/Prep.
- Heating/Ventilating

ST09
- -40°F to 392°F (-40°C to 200°C)
- Accuracy: +/-2°F between -14°F to 212°F (+/-1°C between -10°C to 100°C)
- Min/Max
- F°/C° Switch
- Protective Sheath
- ON/OFF Switch
- Data Hold
- Pocket Clip
- Battery Included (STBAT)
- Drop Resistant
- Waterproof

ST10
- -50°F to 305°F (-45°C to 150°C)
- Accuracy: +/-2°F or +/-1°C
- F°/C° Switch
- Large LCD
- Display updates every second
- Battery included. Free spare battery (STBAT)
- Pocket clip
- 4 23/32" (12cm) stainless steel stem

Pocket Dial Thermometers

ST01
ST02
- 1" dial
- 5" stem
- °F only
- Recalibration adjustment

ST07
ST08
- 1 3/4" dial
- 5" stem
- °F and °C
- Recalibration adjustment

Part No.	Dial	Stem	Temperature Range	Application
ST01	1"	5"	-40°F to 160°F	Refrigerators/Freezers
ST02	1"	5"	0°F to 220°F	Air Conditioners
ST07	1 3/4"	5"	0°F to 220°F (-18°C to 105°C)	Air Conditioners
ST08	1 3/4"	5"	-40°F to 160°F (-40°C to 70°C)	Refrigerators/Freezers

Appliance Thermometers

ST03
ST04
- Stainless Steel Construction
- Hangs or stands
- °F and °C
- Unbreakable lens

ST06
- Horizontal design
- Stainless steel wire clips for easy hanging
- °F and °C

Part No.	Temperature Range		Application
ST03	-20°F to 80°F	(-30°C to 27°C)	Refrigerators
ST04	100°F to 600°F	(38°C to 315°C)	Ovens
ST06	-40° to 80°F	(-40° to 27°C)	Refrigerators/Freezers

8

All of your temperature sensitive areas are protected with the broadest line of temperature alarms: single and dual set point, wireless remote, battery operated and multi-channel. Select the right one for your application.

Applications
- Food Markets, Convenience Stores, Supermarkets
- Restaurants, Florists, Greenhouses
- Laboratories, Pharmaceutical Storage Facilities
- Refrigerated Transport, Cold Storage Facilities
- Computer Rooms

Features/Benefits
- Adjustable alarm temperature ranges
- Audible and visual alarm
- Built-in terminals for remote alarm or telephone dialer connection (except TA7)
- Alarm switch for 'No delay' or '1 hour delay'

TA2
MADE IN THE USA
Single Set Point Temperature Alarm
A reliable, inexpensive alarm for refrigerators and freezers. Just flip a switch to activate alarm on a rise or fall in temperature.

Model No.	
TA2	120 VAC Fahrenheit Model
TA2C	120 VAC Celsius Model
TA2-220	220 VAC Fahrenheit Model
TA2-220C	220 VAC Celsius Model

TA4
MADE IN THE USA
Wireless Remote Temperature Alarm
No wires to run – The remote transmitter uses existing 120 VAC lines to send the alarm signal to the receiver. Use one receiver for up to 20 different transmitters. Switch activates alarm on a rise or fall in temperature.

Model No.	
TA4	Complete System (includes 1 transmitter and 1 receiver)
TA4R (option)	Receiver
TA4T (option)	Transmitter

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TA6
MADE IN THE USA
Dual Set Point Temperature Alarm
Alarms on a rise **AND** fall in temperature.

Model No.	
TA6	120 VAC Fahrenheit Model
TA6C	120 VAC Celsius Model
TA6220	220 VAC Fahrenheit Model
TA6C220	220 VAC Celsius Model

TA7
MADE IN THE USA
Battery Operated Temperature Alarm
For sensitive temperature applications in remote areas, this battery operated unit is inexpensive and easy to install. Alarms on rise in temperature only.

Model No.	
TA7	Farenheit Model
TA7C	Celsius Model

TA3
Digital Temperature Alarm

MADE IN THE USA

This panel mounted temperature alarm with digital display provides both an audible and visual alarm. Alarms on rise or fall in temperature.

Model No.		
TA3	120 VAC	Fahrenheit Model
TA3C	120 VAC	Celsius Model
TA3-220	220 VAC	Fahrenheit Model
TA3C220	220 VAC	Celsius Model
TA3WM		Wall Mount Bracket, optional

TAL2
Dual Temperature Alarm Logger

MADE IN THE USA

Set high and low alarms for two (2) temperature sensitive applications, and track their temperature trends, simultaneously.

Alarm Functions
- Audible alarm & Relay contacts
- Relay contacts can connect to remote alarm dialer
- Programmable alarm delay
- Alarm event storage (up to 45 events)

Logger Functions
- Programmable interval (1 sec. to 18 hrs.)
- Data rollover
- Store 32,250 (single temp.) or 16,125 (dual temp.) data points
- Battery backup
- Software included
- Minimum System Requirements: 8MB of RAM, 2M of disk space, 800 x 600 resolution, 1 free COM port or a free USB port (optional USB interface is required, p/n USBS)

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Temperature Alarm Specifications

	TA2	TAL2	TA4
Alarm Channels	1	2	1
Alarm Adjustment Range	-10°F to 80°F (-25°C to 30°C, Celsius model)	-40°F to 60°F and 0°F to 100°F (-18°C to 38°C and -40°C to 16°C, Celsius model)	-10°F to 80°F (-25°C to 30°C, Celsius model)
Probe	Encapsulated sensor with 6 ft. cord	Encapsulated sensor with 15 ft. cord	Encapsulated sensor with 6 ft. cord
Sensor Type	Thermistor	Thermistor	J-Type Thermocouple
Maximum Probe extension	200 ft.	300 ft.	200 ft.
Temperature Accuracy (Display)			
Maximum Transmit/Receive Range			1500 feet (must use the same electrical lines)
Operating frequency			100KHz
Remote Alarm Connections	Screw type, 120 VAC, 5 Amps (dry contacts)	Normally open (N.O.). Closed on alarm. 48 volts, 100mA maximum	Screw type 120 VAC, 0.1 Amp max., (dry contacts)
Power	120 VAC (220 V optional)	110 V or 220 V power adapter supplied (p/n 14950)	120 VAC (220 V optional)
Battery Backup		9 V alkaline battery (not included)	
Case	Hi-impact thermoplastic		Hi-impact thermoplastic
Mounting	Surface, external holes provided		Surface, external holes provided
Dimensions	3" x 4 7/8" x 1 5/8"	3" x 2.5" x 1.1"	3" x 4 7/8" x 1 5/8"
Weight	13 oz	2.5 oz	24 oz
Warranty	1 year	1 year	1 year

Accessories

		TA2	TAL2	TA4	TA6	TA7	TA3	TAP4	401
SW25	25' Extension Wire	*	*		*	*		*	
SW50	50' Extension Wire	*	*		*	*		*	
SW75	75' Extension Wire	*	*		*	*		*	
SW100	100' Extension Wire	*	*		*	*		*	
TCW25	25' Type J Thermocouple Wire			*			*		*
TCW50	50' Type J Thermocouple Wire			*			*		*
TCW75	75' Type J Thermocouple Wire			*			*		*
TCW100	100' Type J Thermocouple Wire			*			*		*
TA3P	Probe w/ 6' Type J Thermocouple Wire						*		*
TA4P	Probe w/ 6' Type J Thermocouple Wire			*					
TA2PROBE	Probe w/ 6' extension wire	*							
TA6PROBE	Probe w/ 6' extension wire				*				
TA7PROBE	Probe w/ 4' extension wire					*			
14265	Replacement Sensor		*					*	
RA25	Remote Audible Alarm w/ 25' extension	*		*	*		*	*	
USBS	USB to Serial Interface		*						
13495	Serial Port Cable		*						

TAP4
Four (4) Probe Temperature Alarm

Set alarms for 4 separate temperature applications. Provides a quick alert for a multitude of temperature problems.

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Model No.	
TAP4	-40°F to 60°F; 0°F to 100°F, 120V
TAP4-220	-40°F to 60°F; 0°F to 100°F, 220V
TAP4C	-18°C to 38°C; -40° C to 16°C, 120V
TAP4C-220	-18°C to 38°C; -40° C to 16°C, 220V

401
Digital Set Point
Temperature Controller

A completely self-contained 120/220 VAC, ON/OFF temperature controller with digital display.

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Applications
- Refrigeration temperature control
- Temperature alarm
- Temperature indication
- Furnace temperature control

Features
- LCD display of the set point and sensor temperatures
- Includes 15 ft. of Type J thermocouple wire with a 4 inch long stainless steel sensor
- 10 Amp Relay Contacts
- Rear terminal strip for all connections
- Front Panel LED indicates relay is energized
- Energize relay on rise or fall of temperature

Specifications

Sensor	Thermocouple Type J (included)
Scale	0° to 1200°F or -20°C to 1100°C
Display	LCD
Accuracy	±1%FS
Adjustable differential	1° to 25° Centered around set point
Control mode	ON-OFF
Maximum load current	10 Amp, 250 VAC Resistive SPDT Relay
Power Consumption	2 VAC
Supply voltage	120 VAC or 220 VAC, 50/60Hz.
Operating temperature	32°F to 140°F (0° to 60°C)
Panel mounting	3 5/8" x 1 13/16" Cut-out (92mm x 45mm)

Model No.	
401JF	110 VAC Fahrenheit Model
401JC	110 VAC Celsius Model
401JF220	220 VAC Fahrenheit Model
401JC220	220 VAC Celsius Model

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TA6	TA7	TA3	TAP4
2	1	1	4
-10°F to 80°F	-10°F to 80°F	-50°F to 170°F	-40°F to 60°F and 0°F to 100°F
(-25°C to 30°C, Celsius model)	(-25°C to 30°C, Celsius model)	(-30°C to 96°C, for Celsius model)	(-18°C to 38°C and -40°C to 16°C, Celsius model)
Encapsulated sensor with 6 ft. cord	Encapsulated sensor with 6 ft. cord	Encapsulated sensor with 6 ft. cord	Encapsulated sensor with 15 ft. cord
Thermistor	Thermistor	J-Type Thermocouple	Thermistor
200 ft.	100 ft.	2000 ft.	300 ft.
	±2°F at 75°F ambient		
Screw type, 120 VAC, 5 Amp max., (dry contacts)	None	Screw type 120 VAC, 0.1 Amp max., (dry contacts)	Terminal strip screw connection 120VAC, 5 Amps max., (dry contacts)
120 VAC (220 V optional)	9 V alkaline battery (not included)	120 VAC (220 V optional)	110V or 220V power adapter supplied
		9V alkaline battery (not included)	9V alkaline battery (not included)
Hi-impact thermoplastic	Hi-impact thermoplastic	Panel mount	NEMA 3 Type
Surface, external holes are provided	Surface, adhesive pads/keyhole slot	Face panel (1 3/4" x 3 5/8" cut out required)	Surface, keyhole or recessed screws
3" x 4 7/8" x 1 5/8"	5 3/4" x 1 1/2" x 1"	1 11/16" x 3 9/16" x 5 3/16"	6" x 7 1/2" x 3"
13 oz	5 oz	24 oz	1.9 Lbs (0.86kg)
1 year	1 year	1 year	1 year

Application Note:

Many supermarkets have added free standing, portable case displays for seafood, sushi, sandwich preparation, bakery goods and more. These cases are not tied to the central monitoring system. The TAP4 is an ideal instrument for preventing food spoilage in these areas. It's inexpensive, easy to install and monitors up to 4 different temperature sensitive applications.

Vacuum & Pressure Gauges

New! VGC
Vacuum Gauge Coupler

Insures leak free connection to vacuum gauge during measurement

VG64
Digital Vacuum Gauge

Suitable for field or laboratory use, the VG64 delivers high precision at a low price.

Features/Benefits
- Ultra fine resolution: (1 Micron when vacuum ≤ 200 Microns)
- Reads vacuum in 7 international units
- Display updates every 1/2 second
- Convenient built in hanger
- Cleaning port provides quick cleaning and drying of sensor

Accessories

Part No.	
10475	120 volt power adapter
10740	Soft Pouch

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VG60
Electronic Vacuum Gauge

10 segment color coded LED readout provides fast response of vacuum measurements.

Features/Benefits
- Pocket size—only 5 1/2" x 1 3/4" x 1 1/2"
- Cleanable sensor
- Single switch operation
- Low battery indication
- Color coded LED display
- Built-in hanger
- Soft case included (MFDCASE)

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Accessories

Part No.	
DPGT	120 V Power Adapter

VG61
Electronic Vacuum Gauge

- Enjoy the same features as the VG60 in a durable hard case. Sensor cord extends to 5 feet.

Features/Benefits
- Cleanable sensor
- Single switch operation
- Low battery indication
- Color coded LED display

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VG65 *New!*
Professional Series Digital Vacuum Gauge
Same great specifications as the VG64 in a rugged service case

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VG66 *New!*
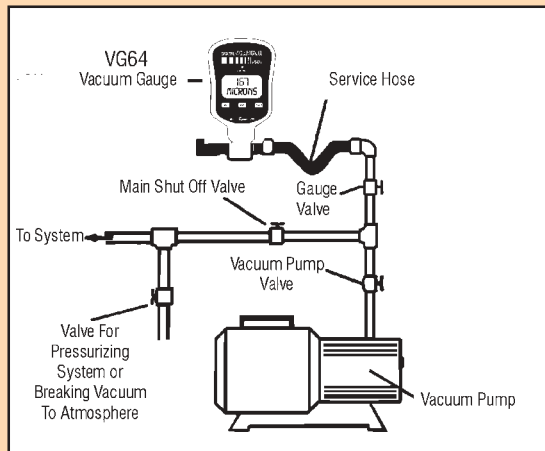### Professional Series Analog Vacuum Gauge

Features/Benefits
- Vacuum range 50 – 5000 microns
- 5 inch Analog meter
- Cleanable Vacuum Sensor
- 500 psi maximum overpressure
- Low battery indicator
- Expandable sensor cord (up to 6 feet)
- Sensor cord extendable using standard telephone cord
- Rugged Service case

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Vacuum Gauge Specifications

	VG64	VG60	VG61	VG65	VG66
Sensor Type	Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
Connector Type	Standard ¼ inch male flare fitting.	Standard ¼ inch male flare fitting.	Standard ¼ inch male flare fitting.	Standard ¼ inch male flare fitting.	Standard ¼ inch male flare fitting.
Vacuum Range	0 – 12,000 Microns (0 – 1,600 Pascals)	50 – 5,000 Microns	50 – 5,000 Microns	0 – 12,000 Microns (0 – 1,600 Pascals)	10 – 5,000 Microns
Scale	Microns, PSI, InHg, milliBars, Pascals, Torr, milliTorr	Microns - 10 LED segments from atmosphere to 50 Microns	Microns - 10 LED segments from atmosphere to 50 Microns	Microns, PSI, InHg, milliBars, Pascals, Torr, milliTorr	Microns, Torr
Resolution	0-200: 1 Micron 201-500: 5 Microns 501-1,000: 10 Microns 1,001-2,000: 50 Microns 2,001-5,000: 250 Microns 5,001-8,000: 500 Microns 8,001-12,000: 1,000 Microns			0-200: 1 Micron 201-500: 5 Microns 501-1,000: 10 Microns 1,001-2,000: 50 Microns 2,001-5,000: 250 Microns 5,001-8,000: 500 Microns 8,001-12,000: 1,000 Microns	
Operating Temperature Range	35°F to 125°F (2°C to 52°C)			35°F to 125°F (2°C to 52°C)	
Overpressure	500 PSI Max (20 Bar)	500 PSI Max (20 BAR)	500 PSI Max (20 BAR)	500 PSI Max (20 BAR)	500 PSI Max (20 BAR)
Accuracy	±10% (50-1000 Microns)			±10% (50-1000 Microns)	
Power Source	9 V Alkaline Battery (not included)	9 V battery (not included)	9 V battery (not included)	9 V battery (not included)	9 V battery (not included)
Auto Shutoff	Yes	No	No	Yes	N/A
Dimensions	5 1/2" x 3" x 1 1/4"	5 1/2" x 1 3/4" x 1 1/2"		5 1/2" x 3" x 1 1/4"	9 1/4" x 7 1/2" x 2 3/4"
Weight	6.7 oz	6.8 oz		6.7 oz	2 1/4 lb.

Application Note:

CONNECTING THE VG64 TO THE VACUUM SYSTEM
A vacuum guage should be connected to the vacuum system at the vacuum port. The "Auxiliary Port" is primarily for cleaning and should normally be closed with the supplied cap. It is possible to connect the vacuum gauge in-line, however, it may restrict flow and increase the evacuation time.
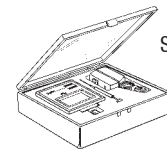
CHECKING HVAC SYSTEMS FOR LEAKS
When checking a system for leaks use only copper tubing and a vacuum proof valve. Generally, standard hoses will not hold a vacuum. If using the blank-off valve on the vacuum pump check it for leaks periodically. At the beginning of the test the vacuum gauge reading may increase due to a system equalization. The vacuum reading should hold after a minimum of 5 minutes. If the reading continues to increase it may indicate a leak in the system.

DPG500
Digital Pressure Gauge

The DPG500 Digital Pressure Gauge is an extremely accurate, pressure gauge that operates on a standard 9 Volt battery or 120 VAC With its universal pressure sensor, it can measure presssure in a liquid, gas, steam and more.

Features/Benefits
- Universal Pressure Sensor (Liquid, Gas, Steam, etc...)
- Range: -14 to 500 PSI
- Large 1/2" high LCD display
- 9 Volt battery operation
- Concealed battery compartment
- Accessible zero adjustment screw
- Power saving "ON-OFF" switch
- Standard 1/8" N.P.T. brass male connection

Patent No. 4777827

Storage Case For Gauge and Accessories Included

Specifications

Scale	-14 to 500 PSI
Operating temperature range	32°F to 120°F
Accuracy	Better than 1%
Full Range Scale	Used with steam/gas/water/air/fluids
Resolution	1 PSI
Display	0.5" LCD
Power	9 V battery or 120 VAC with adapter
Pressure port	1/8 NPT male
Size	3 7/32" x 3 1/4" x 1 1/2"

Standard Accessories

1/8" N.P.T. to 1/4" Flare brass adapter fitting
A.C. Power adapter with 5 foot cord (Part No. DPGT)
Calibration screwdriver
Storage case

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