## WEISS TRADE LINE GLASS THERMOMETERS

Order No.	Description	Range	Price
	GENERAL PURPOSE THERMOME	TERS	
14-25HBM	Dial thermometers, hanging or standing type.	-20 to 80°F and Celcius.	\$13.29
14-HZ80	Glass thermometers, horizontal hanging type.	<sup>-</sup> 40 to 80°F and Celcius.	\$13.91
14-H25SD	Digital thermometers, hanging bracket type.	-60 to 160°F.	\$87.79
	WEISS TRADE LINE GLASS THERMO	METERS	
14-TL5S2110	Straight form type.	<sup>-</sup> 40 to 110°F	\$96.41
14-TL5S2-240	Straight form type.	30 to 240°F	\$96.41
14-TL5A2-240	Angle form type.	20 to 240°F	\$96.41









## **THERMOMETERS**

#### DIGITAL THERMOMETER—REMOTE READING

Case	Range	Sensor Length	Price
S.S. back flange	60/0/160°F	5'	\$117.73
S.S. hanging	60/0/160°F	5'	\$129.47
S.S. front flange	60/0/160°F	5'	\$117.73
Front flange	60/0/160°F	5'	\$116.65
Front flange	40/0/199°F	5'	\$206.10
	S.S. back flange S.S. hanging S.S. front flange Front flange	S.S. back flange 60/0/160°F S.S. hanging 60/0/160°F S.S. front flange 60/0/160°F Front flange 60/0/160°F	S.S. back flange 60/0/160°F 5' S.S. hanging 60/0/160°F 5' S.S. front flange 60/0/160°F 5' Front flange 60/0/160°F 5'













## DIAL THERMOMETERS—NSF REMOTE READING

Order No. Range		Capillary	Price		
	21/2" DIAL SIZE FRONT FLANGE	BACK CONNECT			
14-25FB060	40-0-60°F and Celcius	48"	\$73.39		
14-25FB110	40-0-110°F and Celcius	48"	\$90.85		
14-25FB240	40-240°F and Celcius	48"	\$94.71		
41/2" DIAL SIZE FRONT FLANGE BACK CONNECT					
14-45RB060	40-0-60°F and Celcius	48"	\$210.28		



## WEISS PANEL MOUNTED REMOTE READING DIGITAL **THERMOMETERS**

These "self powered" thermometers operate in very low room light (35 Lux) without any batteries and offer an attractive appearance to existing refrigeration equipment. Each thermometer has adjustable calibration, a ten second update time and wide ambient temperature specifications for both indoor and outdoor installations.

Order No.	ID No.	Case	Range	Size	Sensor Length	Price
14-56SD230	60130	Front flange	50-230°F or °C	2 sq.in.	5'	\$116.96



## GENERAL PURPOSE THERMOMETERS

Order No.	ID No.	Туре	Range	Price
			DIAL THEMOMETERS	
14-PT180	30120	Pocket dial	40-0-180F	\$14.06
14-PT220	30130	Pocket dial	0-220F	\$14.06

## GENERAL PURPOSE THERMOMETERS (cont.)

Order No.	ID No.	Туре	Range	Price	
GLASS THERMOMETERS					
14-PLC120	39010	Pocket glass	30-0-120F	\$16.22	
14-HB120	39110	Vertical handing	40-0-120F&C	\$6.03	



#### REMOTE READING DIAL THERMOMETERS

Furnished in attractive stainless steel cases. NSF listed.

Order No.	ID No.	Туре	Dial Size	Range	Capillary	Price
14-20FB060	40110	Front flange back connect	2"	40-0-60 F&C	48"	\$64.12
14-20FB110	40130	Front flange back connect	2"	40-0-110 F&C	48"	\$80.81
14-20FB240	40140	Front flange back connect	2"	40-240 F&C	48"	\$82.97
14-20HL060	40170	Hanging bracket lower connect	2"	40-0-60 F&C	48"	\$64.12
14-45BB060	40350	Back flange back connect	41/2"	40-0-50 F&C	48"	\$247.36



## REMOTE READING DIGITAL THERMOMETERS

This remote reading dial thermometers are furnished in stainless steel cases and are NSF listed. Additional features include color zoned dual scales and tin plated thermal systems.

Order No.	Case	Range	Sensor Length	Price
SD SERIES LCD				
14-25SD160	Horiz. Wall Mount	60/0/160°F or °C	5'	\$111.24

#### **NSF**

Order No.	Range	Capillary	IDN	Price
SERIES HL—HAN	IGING BRACKET LOWER CONNE	СТ		
14-25HL060	40-0-60°F or °C	48"	40280	\$73.54



## COOPER BIMETAL STEM THERMOMETERS STAINLESS STEEL STEM

Order No.	Dial Size	Stem Length	Range	Scale	Note	Price
CT180-0-6	1"	5″	-40–180°F	F	_	\$152.33
CT220-0-6	1"	5"	0-220°F	F	_	\$152.33
2225-03	2"	4"	-40-160°F	F	Rev. flange	\$40.12
2236-06	2"	5"	0-220°F	Dual F/C	_	\$33.29
2245-03	2"	6"	-40-160°F	F	Rev. flange	\$42.44
2255-03	2"	9″	-40–160°F	F	Rev. flange	\$45.64



# COOPER REMOTE VAPOR TENSION THERMOMETERS USED IN ALL TYPES OF CABINETS, CHAMBERS, REFRIGERATORS AND DISHWASHERS

For temperature readout where sensor and indicator must be separated from one another. All models are recalibrateable, have color-zoned dual scale dials, and tin plated bulbs and capillaries. Capillary length: 48" except where noted. Recalibrateable, dual scale dial, polycarbonate lens/bezel.

Order No.	Mounting	Range	Price	
DIAL SIZE: 2"				
6142-58	Front flange, back connect/flush mount	-40-60°F	\$185.47	
6812-01-03	Back flange, back connect/surface mount	-40-60°F	\$79.44	

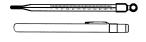
## COOPER ELECTRONIC PANEL MOUNT THERMOMETERS

Order No.	Description	Power	Range	Price
DM120S	Reverse flange surface mount remote sensor digital thermometer. Case is buffed stainless steel with a 2" diameter stainless steel bezel and acrylic lens, with 0.5" LCD.	1.5V battery #393 accessory	-40- 120°F	\$115.41
DM450	Front flange surface mount remote sensor digital thermometer. Case is buffed stainless steel with a 2" diameter stainless steel bezel and acrylic lens, with 0.5" LCD.	1.5V battery #393 accessory	-40— 450°F	\$156.83
PM120	Rectangular remote. $2.625'' \times 1.375'' \times 1''$ white polystyrene. $39''$ remote sensor length and $0.5''$ high LCD display. Mounting flange #9302 is available.	AA battery.	-40— 120°F	\$78.49
PM120C	Rectangular remote. $2.625'' \times 1.375'' \times 1''$ white polystyrene. $39''$ remote sensor length and $0.5''$ high LCD display. Mounting flange #9302 is available.	AA battery.	-40— 50°C	\$78.49
SP120	Unit operates using ambient light. 10' sensor cord.	1.5V battery automatically turns on when ambient light is not strong enough to power the meter.	-58– 158°F	\$92.30



## COOPER GLASS STICK POCKET TEST THERMOMETERS

Order No.	Description	Price
105MXC	-15-105°C	\$68.24
220MX	0–220°F. Mercury filled. Aluminum case and clip included.	\$68.24



## **COOPER THERMOMETERS**

#### FOR MANY GENERAL PURPOSE, FOOD SERVICE AND HVAC APPLICATIONS

Order No.	Type	Description	Scale Range	Price
REFRIGERA	TOR/FREEZER			
335-01-1	Refrigerator/ Freezer	Rectangular aluminum frame, completely enclosed and hangs, stands or can be mounted. $1\frac{1}{3}$ " $\times$ 5". Magnifying lens.	-40—80°F, 2 color temperature dial with 2° markings.	\$12.50
OVEN				
24HP	Cooking (Oven)	Stainless steel case, hangs or stands. Tempered glass lens.	200–600°F, temperature dial with 25° markings. NSF certified.	\$12.94





## COOPER POCKET TEST THERMOMETERS (DIGITAL)

Order No.	Instrument Range	Accuracy	Display	Resolution	Power	Auto Shut-Off	Weight	Price
DPP400W	-40-392°F/ -4-200°C	±2°F from 14–212°F, otherwise ±3°F	.25″	0.1°F/°C, 1°F/°C from 200–392°F	1.5V #392 battery	After 5 min. of non-use, 1 sec. update	2.2 oz.	\$55.38



## PT-100 DIGITAL POCKET THERMOMETER

Measures superheat, evaporator plate and condensing temperatures. Measures air inlet, outlet and ambient temperatures. Provides fast response...within seconds. Accurate within 2/10° surface, 1° ambient.

Order No.	Туре	Description	Price
PT-100	Digital Pocket Thermometer	Ultra sensitive air and surface reading probe; large LCD display (½6" high, 3½ digits, ½6 increments); reads temperatures from ~60.0—199.9°F; battery operated (requires standard 9V battery); temperature "HOLD" switch; and carrying case included.	\$159.13



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#### **UEI POCKET THERMOMETERS**

Order No.	Description	Price
PDT300A	Features -58 to 302°F, built-in magnetic mount, MIN/MAX record, dual purpose probe cover serves as thermometer extension, data hold, CE and NSF listed.	\$50.40
PDT550	Features <sup>-</sup> 58 to 571°F, built-in magnetic mount, waterproof, MIN/MAX record, dual purpose probe cover serves as thermometer extension, data hold, auto power off, quick and easy to read	\$61.09
300A	Features <sup>-</sup> 58 to 302°F, MIN/MAX record, data hold, CE and NSF listed.	\$52.94



#### **UEI POCKET SIZE DIGITAL THERMOMETERS**

Order No.	Description	Temperature Range	Price
DT10K	3½" digit LCD display, 0.435" numerals, min./max.	-40-300°F and -40-150°C	\$142.53
	temperature readings on °F and °C ranges.		

## TEMPERATURE AND HUMIDITY TESTERS



## BACHARACH SLING PSYCHROMETERS INDICATES PERCENT RELATIVE HUMIDITY

Designed for portability (7½" long × 1" diameter). Slide rule construction quickly converts temperature to relative humidity. Thin bulb design gives fast thermal response. Thermometers constructed of shock-resistant glass; stems have deep-etched numerals and 1° scale divisions for easy reading.

#### **SPECIFICATIONS**

Accuracy:	±5% RH	Water reservoir: Built-in			
Order No.	Temperature Range	Thermometer	(4 Wicks, 10" long)	Price	
BA-12-7011	20–120°F mercury-filled	12-0267	12-0011	\$244.86	

#### **ACCESSORIES**

Order No.	Description	Use With	Price
BA-12-0267	Thermometer	12-7011	\$111.94

## COOPER THERMO-HYGROMETER PEN

Order No.	Description	Price
DRH122	For checking temperature and relative humidity readings. Temperature range of 14–122°F, accuracy of ±2°F,	\$92.30
	°F/°C selectable, min/max readings, easy-to-read LCD, and a shirt clip.	



## DIGITAL DIFFERENTIAL THERMOMETERS & PROBES

#### THERMOMETERS—HAND HELD SERIES

Order No.	Range	Probe	Price
14-DT52A4	-50-1,999°F (-50-1,300°C)	2-KS, 1 KG & 1 KB	\$580.77

#### **PROBES**

Order No.	Description	Length	Price
14-KG	Type K general purpose probe	8'	\$131.17

#### DIGITAL TEMPERATURE HUMIDITY TESTERS

This rugged hand held battery power instrument features wide temperature and humidity ranges at a reasonable cost.

	Humidity		Tempera		
Order No.	Range	Accuracy	Range	Accuracy	Price
14-RHT1	10-95% RH	2%	-40-140°F	1°F	\$624.95



## AMPROBE DIGITAL THERMO/HYGROMETER

Features temperature in °F or °C, humidity, min/max, auto power off (20 min), data hold, low battery indicator, cover protects sensor and acts as a handy pocket clip.

		Temperature	Temperature	Humidity	Instruction		
Order No.	Display	Range	Accuracy	(RH)	Size (H × W × L)	Book	Price
TH-2	LCD, fully annunciated dual display	14-122°F (-10- 50°C)	±1°F (±1°C)	5–95%	0.66" × 1.9" × 6.7"	P/N 975751	\$294.95



#### AMPROBE DIGITAL THERMOMETERS

Order No.	Description	Temperature Range	Price
DT-130	Thermocouple Digital Thermometer	<sup>-</sup> 50–1,999°F	\$402.96

## AMPROBE HANDY PACK DIGITAL THERMOMETERS

Features: Solid state: rugged, fast-acting sensing elements: 0.1 resolution: 200 hr. continuous battery life: large LCD display; low battery/over-range indications; rugged molded carrying case.

Order No.	Temperature Range	Humidity (RH)	Response Time	Price
THWD-1	-4 to 122°F	0 to 100% R.H.	60 seconds typical	\$452.83

#### PY-15 DIGITAL THERMOMETER

Order No.	Description	Price
PY-15	Displays temperature in °F or °C. Range: -40 to 300°F, -40°C to 150°C. On/Off switch; water and drop resistant;	\$95.54
	3 min, auto power shut-off, Battery, insulated alligator clips included. Neon bulb indication	



## COOPER SLIM-LINE INFRARED THERMOMETERS

Non-contact infrared thermometers measure surface temperatures fast. These hand-held units are lightweight, ergonomically designed and eliminate cross-contamination during temperature checks. Suitable for use in foodservice and food processing industries as well as HVAC/R, industrial, and automotive applications and where temperature monitoring is essential.

Lightweight and durable, Cooper's slim-line infrared thermometers fit in the palm of your hand. °F or °C selectable. 7-second temperature hold.

Order No.	Instrument Range	Ambient Range	Power	Dimensions	Weight	Price
460-0-8	0-500°F	32-120°F	9V Alkaline or NiCad battery	$7.25'' \times 1.75'' \times 1.5''$	8 oz	\$346.08



<sup>2.</sup> With laser





#### MARS INFRA-RED THERMOMETERS

#### RAYTEK® INFRA-RED LASER THERMOMETERS

Order No.	Description	Temperature Range	Distance to Spot (D:S)	Accuracy	Response Time	Price
25573	ST30 Pro	-25–950°F	12:1	±1% or 2°F	500 mSec	\$905.63



### ALLTEMP DIGITAL THERMOMETERS

Order No.	Description	Price
46-TM250A	Four remote temperature ports, Min/Max memory and differential between any two of the four ports. Temperature range: ~40–300°F. Powered by 9V battery.	\$886.66



#### COOPER HVAC/R TEMPERATURE/HUMIDITY TESTERS

Min/Max feature records highest and lowest temperatures. Auto shut-off after 15 minutes. 9V alkaline battery. Battery eliminator jack.

	Rar	nge		
Order No.	Temperature	Relative Humidity	Comments	Price
SRH77A-E	-40-300°F/°C	10–95% RH	Three zones. Relative humidity and wet bulb temperature measurement. Includes carrying case, probes and batteries.	\$826.03

#### TEMPERATURE/HUMIDITY PROBES

Order No.	Description	Price
1075	General purpose puncture probe	\$106.11



## COOPER INDUSTRIAL MULTI-ZONE TEMPERATURE **TESTERS**

Now with min/max and scan features.

## **SPECIFICATIONS**

Range: -40-300°F/°C

Resolution: 0.1 °F or °C

Accuracy: ±0.2 °F or °C, or ±0.2% of reading

whichever is greater (32-120°F)

Ambient range: 0-130°F max.

Humidity range: Max. RH 90% non-condensing

**Power:** 9V alkaline battery

Display: 4 digit backlighted LCD 0.4" high

Order No.	Description	Price
SH44A	Dual probe tester (also available without probes). Order detachable #1075 general purpose probe and #4010 surface probe.	\$454.69
SH66A-E	Three probe tester. With optional detachable #1075 general purpose probe, #2010 air probe and #4010 surface probe. Battery eliminator jack, or optional #9317 power supply. Automatic shut-off after 15 minutes with override.	\$581.40



## COOPER TRH SERIES TEMPERATURE/RELATIVE **HUMIDITY INSTRUMENTS**

Features include: Two LCD displays indicating temperature ranging from 32-122°F and relative humidity percentage ranging from 25-95% RH; on/off °F/°C switch; and carrying case.

Order No.	Dimensions	Description	Price
TRH122M	_	Mini thermometer/hygrometer with internal sensor. Powered with 2 AAA batteries. Can be wall mounted. Min/max memory records highest and lowest temperatures.	\$143.03

#### COOPER GL SERIES MINI DATA LOGGERS

PC requirements: Windows 95 or higher—minimum of 10MB of free hard drive space and CD-Rom.

**SPECIFICATIONS** 

Temperature range:  $^-13-185^\circ\text{F}/^-25-85^\circ\text{C}$  Clock accuracy:  $\pm 2^\circ\text{minutes}$  per month Temp. conversion:  $\pm 2^\circ\text{F}$  for  $^-4-158^\circ\text{F}$  Overall tag dimensions:  $2'' \times 2^5\%''$ 

Accuracy: ±1°C for -20-70°C Records: 2,048

		,
Order No.	Includes	Price
GL100	Two mini data loggers, two mounts, reader, instructions and software.	\$456.84
GL100-02	Two mini data loggers, two mounts.	\$272.24



## COOPER PROBES FOR 10K OHM THERMISTOR INSTRUMENTS

1/8" PLUG FOR USE WITH MOST ELECTRO-THERM INSTRUMENTS

				Respon	ise Time	
Order No.	Description	Max. Probe Tip Temp.	Wire Type	1 Time Constant	3 Time Constants	Price
1075	Stainless steel puncture probe with semi-pointed tip (Replacement for TM99A, IT660, IT670, IT670A, TC100A, SH66A).	300°F	200°F Black PVC Coil (4')	1 sec.	3.5 sec.	\$106.11
2010	General purpose air and surface (Replacement for SH-44, SH-66).	200°F	200°F Black PVC (12')	5 sec.	14 sec.	\$78.49
4005	Pipe clamp	300°F	_	12 sec.	_	\$276.89
4005MK	Pipe clamp	300°F	<del>_</del>	2 sec.	_	\$276.89
4010	Aluminum surface probe with 8" of velcro captured on wire (Replacement for SH-66).	300°F	200°F Black PVC (12')	3 sec.	10 sec.	\$138.37
4040	hand held, fast, surface contact probe.	300°F	200°F Black PVC Coil (4')	1 sec.	3 sec.	\$216.86

## COOPER PROBES, SPECIAL PURPOSE AND REPLACEMENT

		Max.		Respon	ise Time	
Order No.	Description	Probe Tip Temp.	Wire Type	1 Time Constant	3 Time Constants	Price
2015	General purpose air and surface probe. (Replacement for TM-22,	200°F	200°F Black PVC (12')	5 sec.	14 sec.	\$83.00



Call us for your heating and cooling equipment needs.

We distribute Ruud Products from 1 1/2 Ton through 25 Tons.

## TEMPERATURE TESTERS & LOGGERS



## TESTO 825 SERIES COMPACT IR THERMOMETERS

Combines an infrared and a fast-acting contact thermometer into one compact instrument. Use the infrared side for measurements that are difficult to access and the contact side for unknown or low emissivity materials. Get fas and accurate measurements from both in seconds. Includes a TopSate that protects the meters from dust, dirt, water and impact.

Order No.	Description	Measuring Range	Resolution Infrared	Emission Factor	Wave Length	Ambient temp.	Battery Type	Battery Life	Price
NON-CONTAC	CT MEASUREMENT WITH I	ASER							
0560-8256	For non-contact and quick temperature measurements such as: rotating drums, live parts, uneven surfaces and inaccessible parts. Laser sighting to mark the location of the measurement. Audible alarm if limit value is exceeded.	-58— 750°F	0.9°F	2.0 and 1.00	8–14 μm	32–122°F	(2) AAA round cell	Approx. 20h	\$503.77
+ CONTACT	MEASUREMENT WITH LAS	ER							
0560-8258	Laser sighting to mark the location of the measurement. Audible alarm if alarm limit is exceeded.	-58– 750°F	0.9°F	2.0 and 1.00	8–14 μm	32–122°F	(2) AAA round cell	Approx. 20h	\$841.87



## TESTO 605 HUMIDITY STICK INSTRUMENTS

Order No.	Description	Price
0560-6052	Humidity STICK measures humidity and wet bulb temperature	\$334.72



#### **UEI DIGITAL THERMOMETER**

Order No.	Description	Price
DT0150	Features <sup>-</sup> 328 to 2,498°F, dual display, backlight, time-stamped multifunction record, relative function displays temperature change, accepts type J, K and T thermocouples, data hold. Five year warranty.	\$376.69



## **UEI TEMPERATURE + HUMIDITY TESTER**

Order No.	Description	Price
DTH10	Features 14 to 122°F, 5 to 95% relative humidity, fast accurate electronic sensor, displays relative humidity and temperature at the same time, MIN/MAX record, data hold, auto power-off.	\$201.58



## **UEI INFRARED THERMOMETER**

Order No.	Description	Price
INF150	Features 0–700°F, laser targeting, 7-second auto hold, backlight, switchable °F or °C, built-in carrying strap, distance to spot ratio of 8 to 1, auto power-off, low battery indicator. One year warranty.	\$335.97
INF200	Features 0–788°F, laser targeting, displays MIN/MAX, differential, average and current temperatures, nine measurement memory for all five temperature displays, backlight, switchable °F or °C readings, distance to spot ratio of 8 to 1 adjustable emissivity from 0.30 to 1.0, user programmable hi/lo alarms, low battery indicator. One year warranty.	\$570.13

#### **UEI DT SERIES DIGITAL THERMOMETERS**

Thermistor thermometers which fit easily in your hand or pocket and offer a choice of accuracy and features. Easy to read 0.435" LCD display, Easy to use membrane keypad. Interchangeable probe. Use a liquid, air, surface or extension probe to suit your specific application. On/Off and auto power off extend battery life.

Order No.	Description	Price
DT15A	High Accuracy: $\pm 1^{\circ}$ F from 32–160°F, $\pm 2^{\circ}$ F outside that range. Also available in white (DT15WK). Additional probes available.	\$193.44
DT20A	-58-571°F (-50-300°C). Dual probe inputs. Dual display lets you monitor any two of T1, T2 or differential ( $\Delta$ T). Min/Max record. High visibility backlit display. Data hold. Includes two replacable, submersible metal probes.	\$244.34
DT200	-328–2,498°F or (-200–1,370°C). Triple display. Dual input with temperature differential. Multifunction record with relative clock. Accepts type K, J and T thermocouples. Relative function allows measurement of temperature change. Back light.	\$427.59





Includes: Battery, carrying case, liquid probe and instruction manual.

#### **UEI TEMPERATURE PROBES**

Order No.	Description	Price
THERMISTOR		
ATT-29A	Temperature Probe K-type for DM360, TA1K	\$44.80
ATT55A	4" liquid temperature probe with 30" cord. Use with DT20A, DT15A.	\$81.45
ATT56A	4" air temperature probe with 30" cord. Use with DT20A, DT15A.	\$89.59
ATT57A	4" surface temperature probe with 30" cord. Use with DT20A, DT15A.	\$71.27
K-TYPE		
ATT70	Temperature plug adapter. Use with DM520, DL250.	\$16.29



## WEISS DT52A-2 TYPE K THERMOCOUPLE THERMOMETERS

#### HAND HELD DIGITAL TEST INSTRUMENTS

Features include °F/°C switch, data hold feature, resolution switch (0.1°F or 1°F) plus a 250 hour 9V battery life in a compact 5.3" × 2.8" size. Includes two surface Velcro probes, two probe inputs and the differential feature required in refrigeration and air conditioning service.

Order No.	ID No.	Range	Probe	Sensor Length	Price
14-DT52A2	61230	-50/1,999°F	2-KS	12'	\$477.41



## TEMPERATURE RECORDERS

## CR87B SERIES REMOTE READING TEMPERATURE RECORDERS

Measures and records temperatures in air, gas, liquids, powders and semi-solids. Readings can be made from any distance up to 2000' away by using an optional-long-length thermocouple wire. Two selector switches located on the face panel allow for charting of 3 different temperature ranges at 3 different recording speeds. Additional features include: Large LED digital display. Durable Lexan® polycarbonate case, cover and handle. Free standing or wall mounting (using Keyhold slots on back of case). Furnished complete with 2 cartridge pens and 100 assorted recording charts for all times and temperatures. Any length up to 2000'. Includes remote probe.



#### **SPECIFICATIONS**

Ambient operating temperature: 32–120°F

Battery backup: 8 AA alkaline batteries (not supplied)

adapter

Order No.	Temperature Reading In	Temperature Ranges	Price
CR-87-B	Fahrenheit	-40-30°F, -20-50°F, 50-120°F	\$1,009.47
CR87BC	Celsius	-30-10°C 10-50°C	\$1,219.07

#### RECORDING CHART

Temperature Range	6 Hours	24 Hours	7 Davs	31 Davs
Italiye	0 110013	24 110013	1 Days	JI Days
-40-30°F	CR87-4	CR87-1	CR87-7	CR87-19
-20-50°F	CR87-5	CR87-2	CR87-8	CR87-20
50-120°F	CR87-6	CR87-3	CR87-9	CR87-21
-40-0°C	CR87-13	CR87-10	CR87-16	CR87-22
-30-10°C	CR87-14	CR87-11	CR87-17	CR87-23
10-50°C	CR87-15	CR87-12	CR87-18	CR87-24



#### CR87E EVENT RECORDER

#### **VOLTAGE-SOUND-LIGHT**

Remote reading, with programmable speed and mode ranges. Selector switches located on the face panel allow for the recording of 3 different event modes at 4 different recording speeds.

#### **SPECIFICATIONS**

Ambient operating relative humidity: 96% maximum

Chart speed selectable: 6 hrs., 24 hrs., 7 days, 31 days

**Chart rotation mode:** Selectable—single turn or

continuous

Chart diameter: 6" Display: 3 digit 0.5" LED **Operating voltage:** 110–120V, 50/60 Hz **Primary power supply:** 120 Vac, 50/60Hz

Alternative power: 12V vehicle operation with optional

adapter

Battery backup: 8 AA alkaline batteries (not supplied)

Battery life: 48 hours continuous use

Order No.	Ambient Operating Temp. Range	KEV Range	KEL Range	KES Range	Price
CR87E	32–140°F	24–270 Vac 24–180 Vdc	Illumination thereshold range 18–1,900 Lux ±20%	Sound threshold range 40–114 dB @ 1 Khz ±20%	\$1,237.72

#### **RECORDING CHART**

6 Hours	24 Hours	7 Days	31 Days
EVENT-6H	EVENT-24H	EVENT-7D	EVENT-31D



## CR87P PRESSURE RECORDER

## REMOTE READING, WITH PROGRAMMABLE SPEED AND PRESSURE RANGES SPECIFICATIONS

Ambient operating relative humidity: 96% maximum

**Chart speed selectable:** 6 hrs., 24 hrs., 7 days, 31 days

Chart rotation mode: Selectable—single turn or continuous

Operating voltage: 110–120V, 50/60 Hz Primary power supply: 120 Vac, 50/60Hz

Alternative power: 12V vehicle operation with optional

adapter

rn or **Battery backup**: 8 AA alkaline batteries (not supplied)

**Battery life:** 48 hours continuous use

Chart diameter: 6"
Display: 3 digit LED 0.5"

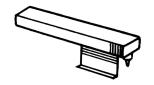
Order No.	Ambient Operating Temp. Range	Pressure Range	Pressure Accuracy	Price
PSI MODEL				
CR87P	32–140°F	0–35 BAR 0–50 psi 0–500 psi	±1% F.S.	\$1,551.40

#### **RECORDING CHART**

Pressure Range	6 Hours	24 Hours	7 Days	31 Days
0-500 psi	6H500PSI	24H500PSI	7D500PSI	31D500PSI
0-150 psi	6H150PSI	24H150PSI	7D150PSI	31D150PSI
0-50 psi	6H50PSI	24H50PSI	7D50PSI	31D50PSI

#### REPLACEMENT PENS

Order No.	Description	Price
CRPENR	Red Pen	\$30.13
CRPENB	Blue Pen	\$30.13



## DR5 DISPOSABLE STRIP RECORDER

#### **5 DAYS CONTINUOUS**

#### **SPECIFICATIONS**

Replaceable chart: Pressure sensitive strip chart

**Drive:** Solid state quartz motor

Clock accuracy: Average ±20 sec./month

**Battery:** Alkaline AAA

		Temperature			
Order No.	Range	Accuracy	Sensor	Record Duration	Price
DR5	-20-100°F	±2°F	Bi-metal coil	5 or 10 day continous	\$103.15



## DATA LOGGERS, TEMPERATURE ALARMS

## PC COMPUTIBLE DATA LOGGERS

## TEMP., HUMIDITY & DEW POINT SINGLE TEMPERATURE OR DUAL TEMPERATURE

Features: set loggers with data plotter or a PC; can be used as conventional chart recorder; locking protection of loggers avoids accidental shut off; read and file charts and graphs from Windows™ software on computer, read information on data plotter display, or plot 6″ circular chart in seconds; 9V batteries used on DLTT and DLTH models; lithium batteries included with DLT models; indication light lets you know that a recording is taking place. Windows™ 95 and Windows™ 3.1 compatible.



Order No.	Туре	Ambient Oper. Temp.	Time Accuracy	Power Soruce	Specifications	Dimensions	Weight	Price
DLT	Temperature Data Logger	-40-150°F (-40-65°C)	± 1,000 ppm @ 75°F	3.6V lithium battery (supplied)	0.1°F resolution, ± 2°F (1°C) accuracy, 10,000 data samples capacity.	2.5" × 3.6" × 1.1"	3 oz.	\$305.50
DLTT	Dual Temperature Data Logger	10-140°F (-12-60°C)	± 100 ppm @ 75°F	9V Alkaline battery (not included)	0.1°F resolution, ± 2°F (1°C) accuracy, 8.000 data samples capacity.	2.5" × 3.6" × 1.1"	3 oz.	\$533.96

#### **ACCESSORIES**

Order No.	Specifications	Price
DLS	Data logger software windows 95, 98, 2,000 and NT compatible.	\$171.93

#### TA3 SERIES DIGITAL TEMPERATURE ALARMS

A digital temperature alarm complete with compartment temperature display. Provides both an audible and visual alarm for all refrigerators and freezers.

#### **SPECIFICATIONS**

**Line voltage:** 120 Vac with 4' cord **Sensor:** Encapsulated with 4' cord

Accuracy: ±1°

Order No.	Description	Price
TA3	110V, °F Model	\$568.70
TA3C	110V, °C Model	\$568.70

#### **ACCESSORIES**

Order No.	Description	Price
TA3WM	Wall mount bracket.	\$40.22

Alarm adjustment range: From  $^{-}50-170^{\circ}F$ Battery: Emergency back-up, 9V (not supplied) Dimensions:  $1^{11}/_{16}"(H) \times 3^{\circ}/_{16}"(W) \times 5^{\circ}/_{16}"(D)$ 



## DATA LOGGERS, TEMPERATURE ALARMS







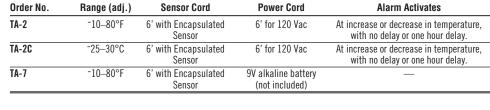
Buzzer alarm warns of dangerous temperature changes in refrigerators, freezers, steam coils or in any room area where loss of temperature is critical.

Price

\$244.93

\$320.48

\$100.95





## **VACUUM GAUGES**



#### ROBINAIR THERMISTOR VACUUM GAUGES

Provides a means of monitoring the pulldown of the vacuum pump on a system. Indicates leaks in a system.

Order No.	Description	Range	Price
14830A	Battery operated, LCD display	25,000–50 microns	\$921.05



## SEALED UNIT PARTS VG SERIES VACUUM GAUGES

A durable, self-contained, battery-powered vacuum.

Order No.	Specifications	Remarks	Price
VG61	Range: 10 segs. from atmosphere to 50 Microns Connections: ¼" male flare Power: (1) 9V battery (not included) Sensor Cord: Extends to 5'	Open type vacuum sensor is cleanable when oil-contaminated; sensor replacement not necessary; single switch operation; may be connected to a refrigeration system in line or to a vacuum port on the pump.	\$451.34
VG63	Sensor Type: Thermistor. Calibrated together with the VG63. Cleanable. Vacuum Range: 5000 to 10 Microns Accuracy @100 Microns: ± 10% Low Battery/Power Indicator: LED Power: 120V Power Adapter (included) or 9V battery (not included) Dimensions: 10½×6×3¼ inches Wt. 2.3 lb.	On/Off switch; battery indicator flashes when switch is ON; remote vacuum sensor designed for easy cleaning if sensor is oil-contaminated; sensor cable extends to 6'; connector for remote sensor; baffle.	\$684.85

Order No.	Description	Price
VG-60	Cleanable thermistor sensor for repeat accuracy. Single switch operation. Low battery indicator light.  Color-coded LED display. High impact thermoplastic case. Built-in hanger and stand support for remote connections. Furnished with a vinyl protective case.	\$363.94
VG-64	Digital vacuum gauge. Suitable for a field or laboratory use. Can accurately read vacuum from 12,000 microns down to 0 over a wide temperature range of 35–125°F. The vacuum can be displayed in user selectable units: Microns (milliTorrs), PSI, milliBars, Inches of Hg and Pascals. Reads vacuum in 7 international units. Cleanable thermistor sensor. Over 35 hours continuous usage.	\$478.17
10740	Accessory	\$20.88

## 4501 AND 14571 VAK-CHEK SERIES VACUUM GAUGES

For proper evacuation and dehydration of refrigeration and air conditioning systems. Complete with sensor.

Order No.	Power	Description	Price
51-4501	2 D Cell Batteries	Vak-Chek automatically compensates for changes in ambient temperature and permits continuous monitoring during evacuation	\$988.51
51-14571	110V or 2 D Cell Batteries	Super Vak-Chek II automatically compensates for changes in ambient temperature and permits continuous monitoring during evacuation	\$815.70



#### **REPLACEMENT SENSORS**

Order No.	Description	Price
51-4510	Sensor for Vak-Check, Super Vak-Check and Super Vak-Check II. 0–50 calibration scale.	\$303.20

## VIZI-VAPR™ REFRIGERANT CHARGERS

Order No.	Description	Price
55-7701	A rapid visible vapor charging device which eliminates the problem of slow vapor charging by removing the	\$234.35
	refrigerant from the cyclinder as a liquid, but injecting it into the system as a vapor.	



## CPS UV LEAK DETECTORS

Order No.	Description	Price
46-UV150	110V HVAC/R Moonshine™ kit. Includes the Moonlight™ 12V battery, battery charger, dye injector, enhancing	\$1,088.15
	glasses, battery pouch and carrying case.	



## SPECTRONICS FLUORESCENT GLO-STICK® CAPSULES

Order No.	Description	Case Qty.	Price
GS-1	$0.5$ oz. of Ar-Glo $^{\scriptsize \textcircled{\tiny B}}$ 1 additive. For mineral oil lubricant systems using up to $4.9$ lbs. of refrigerant.	6	\$28.10
GS-1E	$0.5$ oz. of Ar-Glo $^{\otimes}$ 1 additive. Compatible with Ester oil lubricant systems using up to $4.9$ lbs. of refrigerant.	6	\$30.38
GS-1LT	$0.5$ oz. of Ar-Glo $^{\otimes}$ 1 additive. Compatible with Alkyl Benzene oil lubricant systems using up to $4.9$ lbs. of refrigerant.	6	\$30.38
GS-2	0.5 oz. of Ar-Glo <sup>®</sup> 2 additive. For mineral oil lubricant systems using 5 to 9.9 lbs. of refrigerant.	6	\$37.22
GS-2E	0.5 oz. of Ar-Glo <sup>®</sup> 2 additive. Compatible with Ester oil lubricant systems using 5 to 9.9 lbs. of refrigerant.	6	\$43.29
GS-2LT	0.5 oz. of Ar-Glo <sup>®</sup> 2 additive. Compatible with Alkyl Benzene oil lubricant systems using 5 to 9.9 lbs. of refrigerant.	6	\$43.29
GS-3	0.5 oz. of Ar-Glo <sup>®</sup> 3 additive. For mineral oil lubricant systems using 10 to 25 lbs. of refrigerant.	6	\$110.88
GS-3E	0.5 oz. of Ar-Glo <sup>®</sup> 3 additive. Compatible with Ester oil lubricant systems using 10 to 25 lbs. of refrigerant.	6	\$60.76
GS-3LT	0.5 oz. of Ar-Glo <sup>®</sup> 3 additive. Compatible with Alkyl Benzene oil lubricant systems using 10 to 25 lbs. of refrigerant.	6	\$60.76



## AMPROBE ULTRASONIC LEAK DETECTOR

Order No.	Description	Price
TMULD-300	Contains all the accessories necessary to locate a multitude of leaks. The kit includes the ULD-300 leak detector, UT-300 transmitter, TE-2 tubular extension with adapter, HP-1 headphones, PB-1 Parabola and the carrying case (ULD-CC)	\$1,346.00

## BACHARACH



## THE INFORMANT 2TM DUAL PURPOSE LEAK DETECTORS REFRIGERANT & COMBUSTIBLES

Features: microprocessor-controlled circuitry for guaranteed greater accuracy and reliability; identifies leak sources in just 2/10 of a second; automatic sensitivity adjustment via the microprocessor, even when high levels of background vapors or refrigerants are present.

Detects scores of hydrocarbon gases; interchangeable sensor tips that can be swapped out in seconds; easy-to-clean hydrophobic filter that prevents water from reaching the sensor tip; tapered probe end for easy access to hard to reach areas; flashing probe tip with variable frequencies to indicate changing gas concentrations; audible indicator with mute feature; sensor fail indication; dual bar graph displays that offer visual confirmation no matter what positon the instrument is in.

LED indicating when power is on, the amount of battery life left, and when the mute feature is activated; single probe with 20" maximum length that can also be wrapped around the instrument for a 3" probe; meets or exceeds SAE J1627 for R134a, R12 and R22; will locate many halogens in CFC, HCFC, HFC and blends.

Order No.	Description	Combustible Gases Detected	Refrigerants Detected	Price
19-8043	Refrigerant Only Deluxe Informant 2 Detector Kit. Instrument comes with refrigerant sensor, color-coded sensor tip, protective rubber boot, MagLite <sup>®</sup> , instruction manual, 6 AA batteries, 5 filters, custom soft carrying case, and one container of refrigerant check gas all packaged in a hard carrying case.	All combustible gases and vapors	All CFC, HCFC and HFC refrigerants including: R-12, R-22, R-123, R-134a and blends R-404A, R-408A, R-409A and R-410A (i.e., any refrigerant containing Chlorine, Florine, or Bromine gas)	\$1,395.70
BA-19-8045	Dual Deluxe Refrigerant/Combustible Informant 2 Detector Kit. Instrument comes with refrigerant and combustible gas sensors, color-coded sensor tips, protective rubber boot, MagLite®, instruction manual, 6 AA batteries, 5 filters, custom soft carrying case, and one container of refrigerant check gas all packaged in a hard carrying case.	All combustible gases and vapors	All CFC, HCFC and HFC refrigerants including: R-12, R-22, R-123, R-134a and blends R-404A, R-408A, R-409A and R-410A (i.e., any refrigerant containing Chlorine, Florine, or Bromine gas)	\$1,674.59



#### CPS L-790A REFRIGERANT LEAK DETECTORS

Features include: 10 discrete sensitivity settings; LOCK-OUT™ sensitivity range; microprocessor generated audible alarm; microprocessor controlled visual concentration indicator; low battery indicator; and power saver auto-off.

Order No.	Replaces Part No.	Description	Price
46-LS790A	L-790	Consistent and foolproof. Has a unique combination of microcomputer circuitry and halogen sensor that accurately detects HFC-134a, CFC-12 and other halogenated refrigerants and vapors.	\$805.94

## H-10 REFRIGERANT LEAK DETECTORS

Features a three position sensitivity switch, center mount balance control, and built-in reference leak for precise calibration. Signals leaks two ways, with a bright, flashing light in the probe tip and by an audible horn alarm.



Nominal leak range: Small 0.1 oz./year, medium **Reference leak:** R-11 (refillable), approximate life, 1 0.5 oz./year, large 5.0 oz./year

year

Order No. Description **Power Supply Refrigerant Detection** Price 25303 H-10G leak detector 120 Vac CFC, HCFC, HFC \$1,143.10



#### PARTS AND ACCESSORIES

Response time: Approximately one-half second

Order No.	Description	Price
25310	Maintenance Kit	\$47.93
25315	H-10G Plug-in Sensor Element	\$235.64
25308	H-10B Probe Assembly	\$159.76
25307	H-10A Probe Assembly	\$1,238.08
25314	Probe Tip-Clear Plastic	\$15.98
25324	120V Power Supply for H-10P	\$67.91

#### D-TEK™ REFRIGERANT LEAK DETECTOR

Responds to CFCs (R11, R12), HCFCs (R22, R123), HFCs (R134a) as well as replacement blends (HP62 and AZ50). Equal Sensitivity to CFCs, HCFCs, and HFCs.

#### **SPECIFICATIONS**

Minimum Sensitivity to R12 and R134a: 0.25 oz/yr. (7 g/yr.)

Contamination adjustment: Automatic Operating temperature range: -5-122°F

Order No.	Description	Price
703-006-G1	D-Tek Refrigerant Leak Detector With Nicad Batteries And Charger	\$1,185.75
703-020-G1	Replacement Sensor	\$132.53



#### LEYBOLD INFICON LEAK DETECTOR

Order No.	Description	Price
711-202-G1	Whisper™ Ultrasonic Leak Detector for use in application such as refrigeration leaks, locating worn bearings,	\$674.25
	leaks in pneumatic control systems, natural gas leaks, leaks in vacuum systems, steam traps.	



## TOP GUN™ HANDHELD PORTABLE LEAK DETECTOR

Order No.	Catalog No.	Description	Price
25370	H-10XPro	MARS Top Gun, handheld battery powered portable leak detector. Kit contains leak detector, long life battery, quick charge, battery charger, 8" quick connect probe tip, 16" quick connect probe tip, maintenance kit, calibration reference bottle.	\$905.66
25377	Sensor assembly	Top Gun replacement sensor.	\$203.69



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## GAS-MATE PORTABLE LEAK DETECTORS

Now there's a high-quality, economical and portable gas leak detector. GAS-Mate is perfect for checkuing leaks in residential and commercial combustion appliances, such as natural gas or propane fired heating systems, or gas pipelines.

GAS-Mate uses leading-edge technology to detect hydrocarbons and other gases with twice the sensitivity of competing models.

As you can see, GAS-Mate is a precision instrument. With its rugged construction and high-impact case, GAS-Mate will stand up to plenty of real-world use. In fact, we double the standard one-year warranty time of other instruments with a full, two-year replacement warranty.

Order No.	Description	Price
706-600-G1	Filter kit	\$618.45



## RITCHIE GAS PRESSURE TEST KITS **ACCURATELY SET MANIFOLD PRESSURE FOR NATURAL OR LP GAS**

Diaphragm gauge calibrated in in. of WC

Order No.	Description	Scale	Price
78055	Complete test kit	0-10" WC	\$166.01
78060	Complete test kit	0-35" WC	\$165.32



## 78070 SERIES MANOMETERS—WATER TYPE

Use to set manifold pressure for Natural or LP Gas.

Order No.	Description	Scale	Price
78075	Manometer	0-15"	\$69.09



## ROBERTSHAW GAS PRESSURE TEST KITS

Order No.	Description	Price
900-106	Precision test instruments for accurate setting of manifold pressure. Natural and LP gases. Calibrated in $0-15^{\prime\prime}$ WC. Easy connection to manifold.	\$194.39



## ROBINAIR MANIFOLD PRESSURE TEST SET

Order No.	Description	Price
42160	Manifold pressure test kit, 0–30" WC.	\$163.75
42162	Manifold pressure test kit, pressure measurements from 0–10" WC.	\$163.75

## CO<sub>2</sub> MONITOR 2800 PERSONAL CARBON DIOXIDE MONITOR

Features: compact and lightweight; rapid detection of changing CO<sub>2</sub> levels; quick, intelligent charge in less than two hours; up to 8 hours use on a full charge; easy calibration in fresh air; automatic data-logging provides complete CO<sub>2</sub> exposure record; maintenance free dual wavelength infrared CO<sub>2</sub> sensor; visual and audible alarms; optional earpiece for use in high noise environments.



Order No.	Description	Range	Resolution	Power Source	Operating Temp.	Dimensions $(W \times H \times L)$	Weight	Price
BA-19-7101	CO <sub>2</sub> Monitor 2800	0-50,000 pmm CO <sub>2</sub>	100 ppm resolution	Nickel-metal hydride battery	32°F-104°F	$2.6'' \times 0.8'' \times 5.5''$	7 oz.	\$3,727.75

#### **ACCESSORIES**

Order No.	Description	Price
BA-19-3301	IrDA Interface/Software	\$937.30

#### CO2 ANALYZER 2815

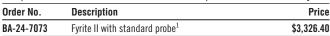
The 2815 is an ideal instrument for IAQ surveys, ventilation verification, food processing/packaging, mushroom farms, fermentation and carbonation process, leak detection for bulk and high pressure CO2 systems.

Order No.	Description	Price
BA-19-8028	Stores up to 850 CO2 readings. Two way IrDA communication link. Easy calibration with built-in user cal feature, pressure and temperature conpensated sensor, range 0—10,000 ppm (10 ppm increments) low flow indicator, internal pump for remote sampling.	\$6,029.28



#### FYRITE II COMBUSTION ANALYZERS

Measures up to 99.9% efficiency. Features automatic calibration, seven selectable fuels, and the ability to function as a digital thermometer. Large digital display and clearly marked key functions take you through the easy test procedures. Directly measures and displays flue gas oxygen content from 0.1–25.5% oxygen and flue gas temperatures up to 920°F. Computes and displays combustion efficiency (0–99.9%), CO<sub>2</sub> equivalent (0–29%), excess air (0–250.0%), and stack loss (0–99.9%). Also, it will measure primary air temperature above or below ambient temperature. Powered by two alkaline 9V batteries.



- 1.  $23^{13}/_{16}$ " long probe. This probe has a  $19^{13}/_{16}$ " flexible section with a 3" rigid section. In stacks with draft diverters or hard to get to sample locations, the standard probe may be required.
- 60cm long probe. This probe has a 24cm flexible section and a 36cm rigid section. The probe also has a stop located on the rigid section that threads into the stack and allows the user to find the hottest stack temperature for accurate calculation of stack loss. Total penetration into a stack is up to 34cm.



#### FYRITE PRO COMBUSTION GAS ANALYZER

Bacharach's new Fyrite Pro combustion analyzer offers precision you can rely on at an affordable price. The Fyrite Pro allows you to verify and adjust the efficiency of residential furnaces and appliances quickly and easily, enabling you to increase your overall service productivity. The Fyrite Pro saves you both time and money. The top of the line Fyrite Pro 125 is packed full of features providing you the necessary information to conduct a combustion test, CO safety test, draft test and differential pressure test in one instrument. The compact and ergonomically designed Fyrite Pro provides quick and accurate measurement of oxygen  $(O_2)$ , ambient and combustion air, stack temperatures and carbon monoxide (CO), draft and differential pressure. Calculations include: combustion efficiency, excess air, carbon dioxide  $(CO_2)$  and CO air free. The Fyrite Pro comes complete with a carrying case, probe & hose assembly and batteries. Optional IR printer provides documentation of results.



Order No.	Model No.	Description	Price
BA-24-8104	PRO 120	Measures oxygen, air temp, stack temp. Calculates combustion eff., excess air, carbon Dioxide, CO (air free). Printer	\$2,793.63
		capability, upgradeable, probe/hose assembly, hard carrying case.	
BA-24-8105	PRO 125	Measures oxygen, air temp, stack temp, carbon monoxide, draft, differential pressure, combustion air temp. Calculates combustion eff., excess air, carbon dioxide, CO (air free). Printer capability, upgradeable, probe/hose assembly, hard	\$3,492.59
		carrying case, protective rubber boot	

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## BACHARACH MONITORS AND ANALYZERS



## GAS-POINTER® II

Order No.	Description	Price
BA-51-7475	The Gas Pointer II is an intrinsically safe instrument for measuring concentrations of methane (or propane), carbon monoxide and/or oxygen in ambient air and flue gases (with optional probe #51-8206)	



#### PCA PORTABLE COMBUSTION ANALYZER

An affordable, easy to use instrument for CO safety and efficiency testing of combustion applications. The PCA is the perfect tool for every service technician in determining safety and efficiency of all combustion appliances; has a large LCD display with backlight that shows eight different combustion values simultaneously, and will directly measure and display flue gas  $O_2$ , temperature, CO (option), and draft (option) while computing and displaying combustion efficiency, excess air,  $CO_2$ , and CO air free. Depending on model, 10 to 100 tests can be stored and downloaded into an infrared printer for a permanent record. The PCA includes a powerful industrial pump, probe and hose assembly with a filter and water trap, four (4) AA batteries, user guide, and an instruction manual which are all packaged into a custom carrying case. Just turn it on and go!

	Features				
Order No.	er No. Model No. Measurements		Calculations	Output Capabilities	Price
ORDERING INF	ORMATION:				
BA-24-8040	PCA 10	Oxygen, Air Temp, Stack Gas Temp	Combustion Efficiency, Excess Air, CO <sub>2</sub>	Printer Interface, Memory Storage (10 tests)	\$3,198.76
BA-24-8043	PCA 25	Oxygen, Air Temp, Stack Gas Temp, CO, Draft/Differential Pressure	Combustion Efficiency, Excess Air, CO <sub>2</sub> , CO (air free)	Printer Interface, Memory Storage (10 tests)	\$5,589.49
BA-24-8045	PCA 35	Oxygen, Air Temp, Stack Gas Temp, CO, Draft/Differential Pressure, NO <sub>(x)</sub>	Combustion Efficiency, Excess Air, $CO_2$ , $CO$ (air free), $NO_{(x)}$ (Ref. $O_2$ )	Printer Interface, Memory Storage (10 tests)	\$8,912.90
BA-24-8145	PCA 65	Oxygen, Air Temp, Stack Gas Temp, CO, Draft/Differential Pressure, NO <sub>(x)</sub>	Combustion Efficiency, Excess Air, CO <sub>2</sub> , CO (air free), NO <sub>(x)</sub> (Ref. O <sub>2</sub> )	Printer Interface, Memory Storage (100 tests), Customized/Printout, Customer ID, Computer Interface	\$9,420.43

#### **ACCESSORIES**

Order No.	Description	Price
BA-24-0788	Replacement Oxygen sensor	\$580.03
BA-24-0886	IR Printer	\$1,119.36



## LEAKATOR® 10 COMBUSTIBLE AND TOXIC GAS DETECTOR

Battery powered, hand-held, combustible and toxic gas detection instrument with the ability to find even the smallest leaks quickly, safely, and easily; a longer probe to make it easy to reach into confined spaces; more, and brighter LED's to visually show gas concentration, longer battery life, longer sensor life.

#### **SPECIFICATIONS**

Power Supply: Five C-cell Batteries
Battery Life: Approximately 30 hours
Sensitivity: 50 ppm Methane
Warm-up Time: approximately 10 seconds.

Warm-up Time: approximately 10 seconds
Probe Length: More than 20 inches

Alarm: Visual and Audible relative to gas presence

Safety Rating: Safe for use in Class I, Division 1 Groups A, B, C and D Hazardous Locations

Sensor Life: Typically over 5 years

Order No.	Description	Price
BA-19-7051	Includes installed and tested gas sensor, flexible probe, customized carrying case, earphone, and instruction manual.	\$941.60

#### **ACCESSORIES**

Order No.	Description
19-0397	Replacement rigid carrying case
19-0398	Replacement sensor and matching resistor
19-0403	Replacement flexible probe assembly
51-2529	Earphone

#### UEI SGA SINGLE GAS ANALYZERS



Features include: Easy-to-read, large back-lit LCD display; rugged construction—and optional rubber boot for added strength; accurate readings ensured with continuous samplings of a specific gas; fast set-up with quick-connect gas for flue and duct measurements; easy, on-site calibration; and extended battery life with unique standby switch.

#### **SPECIFICATIONS**

**Accuracy:** ±5% of reading **Sample time (90%):** Approx. 30–40 sec.

Sensor type:Electrochemical cell typeGas flow rate:700 ml/min.Sensor life:2 yearsGas inlet:Via quick fit couplingsZero adjust:4 turn potentiometer situated on side ofCase size: $8.5'' \times 2.25'' \times 4.75''$ , 2 lbs.

instrument.

Order No.	Description	Price
SGA-91AKIT	Carbon monoxide (CO), 0-2,000 ppm	\$1,378.65

SGA91 also available with flexible hose probe, 4 AA batteries and instruction manual only. Order part No. SGA91.
 Includes: Flexible hose probe with filter (SGAHP), stack probe and handle (SGASP), 4 AA batteries (AB4), carrying case (R8), and instruction manual.

## BACHARACH

## SINGLE GAS ANALYZERS

Can quickly measure and display levels of carbon monoxide (CO), oxides of nitrogen (NO $_x$ ), sulfur dioxide (SO $_2$ ) or oxygen (O $_2$ ). Features: Portable, handheld instrument constructed of a rugged, lightweight plastic; continuous sampling with accurate readings of the specific gas; durable, impact resistant case (even in low temperatures) that withstands fuels and other corrosive liquids; highly visible digital LCD display with backlighting; detachable seven inch, stainless steel probe with handle connected to a four foot, flexible hose; fast, inexpensive battery replacement with "Low Bat" indication; multi-purpose strap designed for easy carrying and secure mounting to pipes or duct work; in-line water trap for combustion applications.



#### **SPECIFICATIONS**

Readout: Four-digit LCD display featuring 1/2" high digits, low battery and over-range indicator

**Battery supply:** Four replaceable, C-size batteries (not included)

Battery life: Approximately 14 continuous hours

Max. probe exposure: 1,000°F
Pump draw: Up to 1" of water
Sensor life: Typically over two years
Dimensions: 8.6" × 3.5" × 2.9"

Weight: Approximately 21 oz. with batteries

Order No.	Description	Range	Factory Calibrated	Instrument Accuracy	Price
BA-19-8004	Monoxor II Analyzer w/Case	0-2,000ppm	500ppm CO gas	±5% of reading	\$1,640.56

Note: Call for replacement parts.

#### **ACCESSORIES AND SPARE PARTS**

Order No.	Description	Price
BA-19-8014	BAM COHb Module Kit w/Case for Monoxor II	\$2,430.79

- 1. Accommodates up to two single gas analyzers.
- 2. Breath Analysis Module.
- 3. Accommodates one single gas analyzer.

Decisions made up front have the greatest impact on productivity.

Take the time to make the best ones!

(206) 273 0227 **14** 



#### **BACHARACH SNIFIT 50 CO ANALYZERS**

Bacharach's low cost analyzers accurately measure carbon monoxide levels in room air. Has own display with backlight. May be used near a hot/water heater, oven/stove or fireplace.

Order No.	Description	Range	Display	Sensor Type	Power Source	Operating Temp.	Price
BA-19-7060	Snifit 50 CO Analyzer	0—1,999 ppm	3½" with yellow-green back light	Electro chemical (Specific to CO)	9V battery	32-104°F (0-40°C)	\$1,046.22

#### **ACCESSORIES**

Order No.	Description	
19-3225	Coiled Cord for Multimeter	
19-3242	Calibration Cup with screwdriver	
19-7061	CO Sensor	
19-7065	Snifit Pump and Hose Assembly	
24-7059	Calibration Kit (without gas)	
54-1994	Calibration Gas (100 ppm)	



# TESTO 325 SERIES COMPANION AUTOMATIC COMBUSTION ANALYZER KITS

Automatically measures  $O_2$  & CO (325-1), calculates  $CO_2$ , calculates efficiency, calculates excess air. Toolbox tough. Track adjustments instantly. One button draft measurements.

Flue gas analyzer includes batteries and calibration certificate. Flue gas probe 12" long, hose 5' long. SoftCase with magnetic back, dir and impact protection. Service case and pack of 10 particle filters and quick reference card.

Order No.	Measureing Range	Resolution	Sensor	Ambient Temp.	Dimensions	Weight
			325-1 KIT WITH	I CO		
3251	-40—1,112°F	0.1°F	Thermocouple type K	40-113°F	8.5" × 3" × 2"	18 ozs.
			325-2 KIT WITHO	UT CO		
3252	-40—1,112°F	0.1°F	Thermocouple type K	40–113°F	8.5" × 3" × 2"	18 ozs.
325-3						
3253	_	_	_	_	_	_
325-I						
3251	_	_	_	_	_	

## UEI



## CO, CO2 ANALYZERS

The new Kane-May SGA96 carbon dioxide analyzer is the simplest and most cost effective answer for measuring  $C0_2$  - an excellent indicator of indoor air quality.

Order No.	Description	Price
SGA96KIT	0–2,000ppm. Carbon dioxide kit contains SGA96 analyzer, $4\times$ MN1500 batteries, operators manual, and fitted carrying case.	\$1,378.65

#### **COMBUSTION AND CO ANALYZERS**

The KM900 is designed for commercial and light industrial contractors and technicians. Preprogrammed fuels include natural gas, butane, propane, light oil, heavy oil, coal and coke.

Order No.	Description	Price
KM900	Measures O <sub>2</sub> and CO, calculates CO <sub>2</sub> efficiency and excess air, 0–10,000 ppm H2 compensated CO	
	sensor, large 4 line display, long life rechareable battery, large cordura case, 150 memory positions.	

The C100A is the latest addition to the UEI combustion family. This versatile and upgradeable analyzer is capable of quick and easy testing of residential and light commercial equipment for efficiency and safety.

Order No.	Description	Price
C100A	Measures O <sub>2</sub> stack and ambient temperatures, calculates CO <sub>2</sub> efficiency and excess air, backlit triple display allows technician to make burner adjustments without having to change the instrument settings, 99 memory locations to store and recall test results, infrared printer port, hard carry case capable of holding instrument, optional IR printer, AC adapter and probe.	



#### **CARBON MONOXIDE DETECTOR**

Order No.	Description	Price
C071	Measures CO (in ambient air) from 0–999 ppm, tri-color LED indicates concentrations at 3 levels complying with residential and work place standards, auto zero at turn on, backlit display, MAX continually updates highest CO reading, audible alert triggers above 35 ppm indicating dangerous CO concentration. Three year warranty.	\$812.43



## GAS LEAK DETECTORS, DIGITAL MANOMETER, MEGOHMMETERS

## UEI GAS LEAK DETECTORS AND DIGITAL MANOMETER GAS LEAK DETECTORS. DIGITAL MANOMETER

Order No.	Description	Price
GAS LEAK DETECTORS		
CD100A	Minimum detection 50 ppm methane, long 18" gooseneck for hard to reach areas, 'Tip-Light' in sensor cap illuminates the search area, sensor provides accurate detection, audible and visual tick rate fully adjustable, headphone jack. Detects methane, natural gas, hydrogen, butane, propane, acetone, gasoline, refrigerants, ethylene oxide, hydrogen sulfide. One year warranty.	\$405.20
CD200	Minimum detection 50 ppm methane, long 18" gooseneck for hard to reach areas, visual leak detection by color coded LED's, separate user adjustable alarm for predeterminded level detection, precision sensor detects even the smallest leaks, 'Tip-Light' in sensor cap illuminates the search area, adjustable tick rate to locate leaks quickly and easily, fast response time of less than two seconds to 40% LEL, headphone jack. Detects methane, natural gas, hydrogen, butane, propane, acetone, gasoline, refrigerants, ethylene oxide, hydrogen sulfide. Three year warranty.	\$751.34
DIGITAL MANOMETER		
EM100A	Digital electronic manometer measures "20" to 20" water gauge (WG), 0.05" WG resolution below 10" WG, protective boot, easy to use, large LCD display, auto power-off, long battery life, includes 18" tubing and fitting.	\$280.22







## IMPERIAL A2-2 ANNIE® II DUAL VOLTAGE HERMETIC ANALYZERS

## FOR UNITS UP TO 3 HP, 25A MAXIMUM

An entry level analyzer for compressor diagnostics. Features include: High quality rocker switches and components; indications by neon lamps; panel mounted breaker; 240V adapter cord; and built-in carrying case.



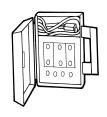
Electrical rating: 110-250 Vac @ 60 Hz

**Capacitor ranges:** 75–155 mfd; 160–240 mfd; 250–

380 mfd

**Dimensions:**  $14\frac{1}{2}$ " × 9" ×  $4\frac{1}{2}$ "

Order No.	No. Replaces Part No. Description		Price
A2-2	A-2	Rocks free frozen or stuck units by reversing motor rotation. Checks windings for shorts, opens, grounds or continuity. Also functions as an auxiliary capacitor.	





## M-500 SOLID STATE MEGOHMMETERS

Order No.	Description	Use With	Price	
M-500	Indicator range of 20–1000 megaohms. Zone scale to indicate condition of insulation.	Hermetic refrigeration compressors, motors and appliances.	\$408.89	



## **UEI MEGOHMETERS**INSULATION RESISTANCE TESTERS

Order No.	Description	Price
IRT10	1,000V output, sealed water resistant rugged metal housing, damping time exceeds 4 seconds, hand-crank power-supply, accurate to within one division. One year warranty.	\$437.78
IRT20	1,000, 500 and 250 volt output ranges, sealed water-resistant rugged metal housing, damping time exceeds 4 seconds, hand-crank power-supply, accurate to within one division. One year warranty.	\$730.98



## REFRIGERANT SCALES



## **UEI DMEG2 INSULATION RESISTANCE TESTER**

Order No.	Features	Ranges	Price
DMEG2	Large LCD display, completely portable, solid state circuitry, battery operated, battery check feature, automatic circuit discharge, and is fuse protected.	$200\Omega-$ All m $\Omega$ ranges autoranging for best resolution. $200 m\Omega$ (500V, 1,000V)	\$849.08



## CPS CC SERIES COMPUTE-A-CHARGE™ SCALE PORTABLE REFRIGERANT DISPENSING UNIT

Features include microcomputer circuitry and easy to use keypad controls which allow for automatic transfer of a preset amount of refrigerant (in metric or imperial units). Also used as an automatic recovery scale.

#### **SPECIFICATIONS**

Operating range: 0-110 lbs. Max. operating pressure: 300 psi

Order No.	Replaces Part No.	Description	Price
46-CC100	_	Battery operated. Metric switchable. Removable display unit. Economy model.	\$805.94

Electrical Ratings: AC automatic or manual operation—80-140V @ 50/60 Hz, 4 W max.



## LEYBOLD INFICON WEY-TEK™ REFRIGERANT CHARGING SCALE & OPTIONAL CHARGING MODULE

Precision electronic scale that lets you easily weigh and charge from the same large platform. Its high-accuracy load cell gives the correct reading each time—no mater where the cylinder is on the weighing platform. The large LCD display is easy to see at a distance, even in direct sunlight. Transfers all refrigerants by weight. Measures in lbs. or kgs.

Order No.	Weighing Cap.	Power	Display	Scale Zeroing	Weight	Dimensions (W × L × D)	Price
707-600-G1	110 lbs.	9V alkaline battery	LCD	Auto with power-on; Manual	6 lbs.	$12'' \times 16^{3/4}'' \times 1^{3/4}''$	\$604.50

709-700-61 Charging module provides programmable 1/4 oz increments and power to the scale. Display target charge and	
total refrigerant transferred.	\$627.75

## PELOUZE HANGING UTILITY SCALE

Order No.	Description	Price
660-001	For accurate refrigerant dispensing or filling. Ideal for weighing and checking most gas cylinders. Dial adjusts for tare weight. Dual dial markings run clockwise and counterclockwise. 70 lb. capacity, ½ lb. increments. Lightweight.	\$274.31



## AMPROBE CLAMP ONS

#### **DIGITAL CLAMP-ONS**

#### **ACD-10H-ULTRA**

Teardrop jaw design allows the measurement of AC current in confined spaces, auto ranging selects the best range for the measurement, auto power off, continuity buzzer will give an audible sound when a complete circuit is encountered, data hold will lock the reading for viewing, rubber holster will increase the durability. It offers a reliable, affordable, and easy to use solution for AC Amperage, AC Voltage, and Resistance/Continuity measurements. The ACD-10 is average sensing.

Order No.	AC Volts	AC Current	Ohms	Ohms/ Continuity	Continuity Buzzer	Measurement Rate	Price
ACD-10H-ULTRA	0–400, 400– 600 (40–500 Hz)	0–400A (40– 500 Hz)	0–4K $\Omega$ ; Resolution $1\Omega$	Circuit protection 600Vrms for one minute by PTC	<230 $\Omega$ (approximate)	4 times per second minimum	\$451.74

#### **ACD-10 TRMS**

Teardrop jaw design allows the measurement of AC current in confined spaces, true RMS measurement reads accurate regardless of power quality, auto ranging selects the best range for the measurement, auto power off, continuity buzzer will give an audible sound when a complete circuit is encountered, data hold will lock the reading for viewing, rubber holster will increase the durability. It offers a reliable, affordable, and easy to use solution for AC Amperage, AC Voltage, and Resistance/Continuity measurements. The model ACD-10 TRMS accurately measures True RMS AC current to a crest factor of 2.5 on lines containing non-linear loads or where harmonics may be present.

Part No.	AC Volts	AC Current	Ohms	Ohms/ Continuity	Continuity Buzzer	Measurement Rate	Price
ACD-10TRMS	0–400, 400– 600 (40–500 Hz)	0–400A (40– 500 Hz)	0–4K $\Omega$ ; Resolution 1 $\Omega$	Circuit protection 600Vrms for one minute by PTC	<230Ω (approximate)	4 times per second minimum	\$606.29

#### ACD-12

Auto power off, overload protection on all ranges, data hold will lock reading for viewing, continuity buzzer when complete circuit is encountered. The model ACD-12 is an average sensing instrument calibrated to give an RMS readout of a sine wave.

Part No.	Functions	Continuity With Buzzer	Measurement Rate	DC Volts	AC Volts	AC Amps	Ohms	Price
ACD-12	DCV, ACV, ACA, OHMS, Continuity	0–150 Ω	4 times per second minimum	0-400V	0-600V	0-400A	$1\text{-}4\text{K}\Omega;$ Resolution $1\text{K}\Omega$	\$566.66

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Burnaby (604) 298-4472 Calgary (403) 214-2134 Edmonton (708) 451-4744 Saskatchewan (306) 373-9227 Kitchener (519) 748-0961 St. Catharines (905) 988-1724 Windsor (519) 251-9925 **597** 

#### DRS-1

Model DRS-1 will directly measure AC current, AC & DC voltage and resistance. It is average sensing but calibrated to give an RMS readout of a sine wave. When the HOLD button is activated, the reading in the display is held indefinitely. the instrument is manual ranging with a 3½" digit large LCD display, continuity beeper, display hold, insulated input jacks, standard 9V battery, up to 32mm dia (750 MCM) conductor, 4' drop proof, safety test leads, protective carrying case, hand guard design, meet IEC1010-1 / UL3111 standard.

Order No.	DC Volts	AC Volts	AC Amps	Resistant Range	Circuit Protection	Price
DRS-1	0-600V	0-600V	0-600V	200 Ω	to 600V	\$369.73

#### **ACCESSORIES & REPLACEMENTS**

Order No.	Description	Price
SV-16	Carrying case	\$78.93

#### AC/DC-620T TRUE RMS CLAMP-ONS

Addresses the needs of both electrical contractors and the HVAC technician. Contains the True RMS AC and DC Amperage, True RMS AC and DC Voltage, Single, Dual and Differential Temperature, Capacitance, and Resistance measurement capabilities. Allows recording of maximum, minimum, and average values of all parameters possible. Dual display of Celsius and Fahrenheit temperature.

Order No.	Description	Price
AC/DC-620T	Resistance measurement up to 4k. PEAK hold. Conforms to UL, ULc, TUV, CE, IEC standards. Overload Protection on all ranges. Auto power off. Sleep mode. 4 digit LCD. Auto Relative/Zero Reference Button. Low battery indicator. Drop proof. Requires 1 or more optional type K thermocouple model TPK-56 and single type-K adapter model TAC-DMM or Dual type-K adapter model DKTA-620.	\$1,113.37



## **MULTIMETERS & CLAMP-ON ACCESSORIES**

Order No.	Description	Price
CC-AC/DC	Carrying Case	\$74.78
DKTA-620	Dual input K thermocouple to banana plug adapter	\$116.33
TAC-DMM	Single input K thermocouple to banana plug adapter	\$54.02
TMA-1	TMA-1 consists of the Multi-Temp <sup>®</sup> module and one TPSF probe. The TMA-1 allows users of digital multimeters to measure temperature directly in terms of DC millivolts. It also allows direct measurement of temperature difference (additional probe required). Fahrenheit or Celsius measurements are accomplished by selection of °F or °C probes.	\$361.44
TPIC	-55—150°C immersion probe	\$195.26
TPIF	-50-130°F immersion probe	\$195.26
TPK-56	Type K bead thermocouple (600°F MAX)	\$66.46
8AG360X023	Fuse, R S-3 Super	\$16.61







#### ROTARY-SCALE CLAMP-ON METERS

Order No.	AC Current	AC Current	AC Voltage	Measurement	Case	Leads	Price
RS-3 <sup>1</sup>	1"	0-6/15/40/100/300	0-150/300/600	AC amps, AC volts and ohms	Standard	Clip-type	\$395.73

- 1. Includes 25 ohm midscale ohmmeter. Integral fuse/battery attachment OHB-3R supplied with fuse.
- 2. Includes Extendo Leads, which have replaceable screw-in probe tips.
- 3. Calibrated for 400 Hz operation for the maritime & aircraft industries.

## ANALOG CLAMP-ONS ACCESSORIES & REPLACEMENTS

Order No.	Description	Price
OHB-3HE	Ohmmeter attachment for RS-3 and RS-3 Super	\$70.63
VLK-411R-WTR	Extendo leads	\$103.86

## AM SERIES INDUSTRIAL DIGITAL MULTIMETERS

Features standard banana jacks, over-range indication, low battery indication, reversed polarity indication and high energy protection—fused to 600V AC/DC to help protect instrument as well as user from misapplication.

#### **SPECIFICATIONS**

Circuit protection: For  $\mu A$  and mA: 600V fused

For 10A range: 15A Overload protection

Power supply: One 9V alkaline battery

Operating temperature/

relative humidity: 32-120°F, 80% RH

Display: LCD

Sampling rate: 2.5 times/sec.
Case voltage breakdown: 3,000 Vac

Polarity indication: "+" implied, "-" displayed Over-range indication: 1 shown, remaining digits

blank

Input impedance:  $10 \text{ M}\Omega$ 



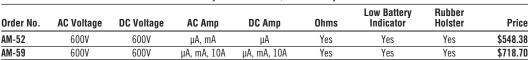
		Ranges			
Order No.	Voltage	Current	Resistance	Additional Features	Price
AM-20	200mV, 2V, 20V, 200V, 1000V	200μA, 20 mA, 2000mA, 10A	$200\Omega$ , $2$ kΩ, $20$ kΩ, $20$ kΩ, $20$ 0kΩ, $2$ ΜΩ, $20$ ΜΩ	Tilt stand, Compact size, 3½ Digit, 2000 count annunciated LCD display, Supplied with 9V battery, test leads and instruction manual.	\$149.56

- 1. Except the very sensitive  $0-20\Omega$  range where it may be necessary to use the ohm zero adjustment screw (marked  $0-20\Omega$  "0" adj) to zero the instrument.
- 2. Use optional accessory high voltage probe Model HV-2 and resistor Model HVR-4 or HVR-41 for 15K Vac/dc.
- 3. These ranges available through use of optional current transducer accessory Model A663-4B (0-300A) and Model A664-4B (0-1,000A), 45-400 Hz. The Amptran Transformer Models CT50-1 and CT50-2, the DecaTran 10:1 Transformer Model A50-1, and the Energizer Line Splitter Model A47-L may be used with the A663-4B/A664-4B Transducers to further expand the current measuring capability of the AM-14.
- 4. Use optional accessory temperature probe Models RBT-11B, RBT-12B, or RBT-13B (all for non-corrosive application).
- 5. Use optional accessory AC leakage detector Model ACL-4B.
- 6. Use optional accessory current transducer Model AW80 (0-20/200 KW) and Model AW81 (0-40/400 KW). Both units also measure 0-1,000A AC (50-60 Hz).
- 7. Available through use of optional temperature probes Model TPI-14 (immersion), TPS-14 (surface), and TPA-14 (air).
- 8. Available through the use of optional AC leakage detector accessory Model ACL-14.

Note: Do not use NI-CAD batteries with above models.

## DIGITAL MULTIMETERS

The Amprobe AM-50 Series are hand held, battery operated, professional quality, digital multimeters designed for today's complex HVAC/R, electrical and electronic system diagnostics and troubleshooting. The entire AM-50 Series is housed inside a gasket sealed casing which keeps out grease, oil, dirt and moisture to maintain superb accuracy and reliability. Besides, the casing is made of high impact, thick wall fire retardant material to maximize durability of the meter, and safety to the user.





#### AM-120

Large recessed  $3\frac{1}{2}$  digital LCD for easy reading. Auto zero on all ranges to prevent false readings. Rubber holster increases the durability of the meter. Continuity buzzer will give an audible sound when checking complete circuit.

Order No.	AC Voltage	DC Voltage	AC Amp	DC Amp	Ohms	Low Battery Indicator	Rubber Holster	Price
AM-1200	750V	1,000V	mA, 10A	mA, 10A	yes	yes	yes	\$282.48



#### **ULTIMATE SERIES DIGITAL MULTIMETERS**

Offers DC $\pm$ /AC True RMS with a wide AC bandwidth, backlighted LCD display for all light conditions.

Features:

Hand held meters with benchtop features for complex system diagnostics. Measuring functions include DC voltage, AC voltage, dBm, Adaptor input, Frequency, Duty Cycle and others. Dual display LCD. Heavy duty gasket sealed housing. Sealed battery compartment keeps leakage contaminant off the PC board. Equipped with a heavy duty rubber holster, test leads with alligator adaptor clips, 9 volt battery and instruction manual.

Order No.	AC Voltage	DC Voltage	AC Amp	DC Amp	Ohms	Low Battery Indicator	Rubber Holster	Price
AM-91	600V	600V	μΑ, mΑ, 10A	μΑ, mΑ, 10A	Yes	Yes	Yes	\$1,033.53



## PMM-2 DIGITAL CLAMP ON TRANSDUCERS

	DC Voltage				AC Voltage			Resistance		Resistance	
Order No.	Range	Accuracy	Input Impedance	Range	Accuracy	Input Impedance	Range	Accuracy	Overload Protection	Oper. Temp.	
PMM-1	320 mV-600V	± (0.7%+2	$10~{ m Meg}\Omega$	3.2V- 600V	± (1.7%+5	10M ohms/less than 100pF	300Ω- 30MΩ	± (1.2% rdg + 4	600V DC/AC rms max	32–122°F, 0–80% R.H. Requires (2) 1.5V	
		dgt)			dgt)			dgt)		batteries	



#### **DIGITAL CLAMP OR TRANSDUCERS**

Order No.	Range	Output Voltage	Operating Temperature	Accuracy	Price
PMM-C	0.4A to 300A AC RMS	_	32°F to 113°F<75% R.H.	± (1.9%+0.5A) 50-60Hz	\$216.02
A-400	0.1A to 400A AC RMS	1mV AC per 1A AC	32° to 113°F <75% R.H.	50/60Hz	\$324.04



## **VP-440 VOLT PROBE**

Order No.	Description	Price
VP-440	Checks AC voltage without disconnections on the following items: Cable, Circuit breakers, Wall sockets, Junction boxes, and fuses. Completely insulated. Can detect from 110–600 Volts AC. Includes 2 AAA 1.5 volt batteries and instructions.	\$78.93



## CIRCUIT/VOLTAGE TESTER

A pocket sized instrument that will safely indicate AC voltage using non-contact method.

	Test								
	AC Vo	oltage			Continuity	Microwave Leakage		Battery	
Order No.	Contact I	Voncontact	DC Voltage	Polarity	Check	Detection	Life	Replacement	Price
CVF-3	70–250 Vac	70–600 Vac	1.5–250 Vdc	1.5–36 Vdc	0-50 MΩ	>te/5mW/cm²	Min. 5 hours	392A; AG3; LR41; 192; V3GA (1.5V × 2 alkaline or silver type).	\$49.85

## To Our Customers & Suppliers We Thank-you.

## COMPACT SERIES MEASURING STICKS

#### **TESTO 505P2 DIGITAL MANOMETER.**

The testo 505-P2 Digital Manometer is compact and very easy to operate. The magnetic back attaches to ducts, furnaces, etc. for hands-free use. Features: one button easy operation; not position sensitive; compact size fits in pocket or tool box; auto-off function; displays H<sub>2</sub>O, PSI, or hPa; magnetic back

Order No.	Range	Resolution	Oper. Temp.	Battery	Battery Life	Pressure Ports	Price
0560-5052	<sup>-</sup> 10–52″ H <sub>2</sub> 0	0.01" H <sub>2</sub> 0	32-105°F	3V (CR2932)	Approx. 100h	1/8" barbed	\$368.53



## NON-CONTACT TACHOMETERS

## NON-CONTACT AND MECHANICAL RPM, SPEED AND LENGTH MEASUREMENTS

Has the ideal combination of optical and mechanical rpm measurement. Reflectors are attached to the object being measured during optical measurement. The Visible, red modulated light beam is directed on the reflector. An optical becomes a mechanical measurement by simply attaching an adapter and a cone or running wheel.



		Measuring Range			Distant	Oper.		Auto			
Order No.	Sensor	RPM	Speed	Length	from Object	Temp.	Battery	Off <sup>1</sup>	Dimensions <sup>2</sup>	Weight	Price
0563-0470	Optically with modulated light beam, mechanically with adpater and cone or running wheel.	1-99,999	4–78,000 in/min 1	_99 <u>,</u> 999"	Max. 14"	32–122°F	(2) 1.5V AA	30 sec.	7" × 2" × 1"	7 ozs.	\$943.30

Includes: Adapter, hollow cone, running wheel, case, reflectors, batteries.

- 1. Mean/max/last reading are saved.
- 2. Without cone or running wheel.

#### NON-CONTACT OPTICAL TACHOMETER

Can be easily measured optically and without contact. Simply attach a reflector to the object to be measured and point the visible, red modulated light beam a the reflector and then measure.

Order No.	Sensor	Measuring Range	Distant from Object	Oper. Temp.	Battery	Auto Off <sup>1</sup>	Dimensions	Weight	Price
0563-0465	Optically with modulated light beam.	1—99,999 rpm	Max. 14"	32–122°F	(2) 1.5V AA	30 sec.	6"×2"×8"	5 ozs.	\$672.82



Includes: Case, reflectors, batteries, instruction manual.

1. Mean/max/last reading are saved.

## FIBER OPTIC SCOPE

## **TESTOVIEW VISUAL INSPECTION TOOL**

Inspect and explore inaccessible areas. Adjust into almost any position. One-hand operation. High impact ABS sheathing. Rugged and water resistant. Clearly focuses. Ideal for checking blocked air conditioner evaporator coils, examining heat exchangers, feeding thermostat wires, checking for duckwork clearance, verifying duct integrity during installations and renovations.



Field of veiw: 40° Housing: ABS black Min. focus distance: 3/4" Battery type: 2AA

Operating & storage temperature: -10-120°F

Order No.	Cat. No.	Length	Dimensions	Weight	Price
0632-0318	318-1	36'	6" × 1.4" × 2.43"	11 oz.	\$1,247.59
0632-0319	318-2	18'	6" × 1.4" × 2.43"	8 oz.	\$1,010.92



#### DM SERIES DIGITAL MULTIMETERS

Features include: Easy-to-read; easy-to-use; dependable and safe; ruggedized to withstand a 10' drop; auto polarity; data hold; audible continuity buzzer; and 3½ digit LCD with .91" digits. 5-year limited warranty.

#### **DM200**

## **SPECIFICATIONS**

 AC amps:
 40m, 400m, 4, 10
 Resistance:
 400, 4k, 40k, 400k, 4M, 40M

 AC volts:
 4, 40, 400, 750
 Frequency:
 200, 2k, 20k, 20k

 DC amps:
 40m, 400m, 4, 10
 Continuity:
 <100 Ω</td>

 DC volts:
 400m, 4, 40, 400, 1,000
 Diode:
 approx. forward bias

DO VOILO.	100111, 1, 10, 100, 1,000	Diodo: approx. forward blao					
Function	Range	Accuracy					
AC Volts	400mV, 4V, 40V, 400V, 750V	+/~ (1.5% reading + 3 digits)					
-		+/- (2.0% reading + 4 digits)					
DC Volts	400mV, 4V, 40V, 400V, 1000V	+/ <sup>-</sup> (0.5% reading + 3 digits)					
AC Current	40μA, 400μA, 4mA, 40mA, 400mA	+/ <sup>-</sup> (2.0% reading + 5 digits)					
50-500 Hz	10A	+/ <sup>-</sup> (3.0% reading + 5 digits)					
DC Current	40μA, 400μA, 4mA, 40mA, 400mA	+/ <sup>-</sup> (1.0% reading + 5 digits)					
-	10A	+/ <sup>-</sup> (2.0% reading + 5 digits)					
Frequency	4k, 40k, 400k, 4M, 40M	+/- (0.5% reading + 2 digits) sine wave @ $\tau$ 2 VRMS					
(Hz)							
Capacitance (in farads)	4n, 40n, 400n, 4µ, 40µ, 400µ, 4m , 40m	+/~ (3% reading + 4 digits)					
Resistance	400Ω, 4ΚΩ, 40ΚΩ, 400ΚΩ, 4ΜΩ	+/- (1.0% reading + 3 digits)					
-	40ΜΩ	+/~ (3.0% reading + 7 digits)					

#### DL HIGH-PERFORMANCE, TRUE RMS, CAPACITANCE

Order No.	Description	Price
DL297T	The DL297T Measures True RMS. Accurately measure voltages when harmonics are present. Autoranging. Easy to	\$509.04
	read. Ruggedized and Water Resistant.	



## **MULTIMETERS**

Order No.	DC Volts Max	AC Volts Max	DC Amps Max	AC Amps Max	Base Accuracy	Temperature Range	Ohms Max	Diode Test	Warranty	Price
DL293	1,000	750	10	10	±0.3%, ±1 digit	-40-2,498°F	20M	yes	5 yrs	\$213.80
DL295	1,000	750	10	10	_	-40-2,498°F	10M	no	5 yrs	\$384.84
DM400	600	600	10	10	±0.5%, ±3 digit	-40-2,498°F	40M	yes	5 yrs	\$264.70



#### **DIGITAL MULTIMETERS**

The DM600 is a revolutionary design in digital multimeters. One-handed operation and open jaw measurement capabilities gives you the fast line-of-sight measurements needed in tough jobs.

Order No.	Description	Price
DM600	Features 400 Amps AC, 600V AC and DC, resistance to 40 Megohms, continuity, min/max record, mV DC resolution allows use of DMM adapters and standard spaced input jacks, data hold, auto power-off, UL CATIII 600V. Three year warranty.	\$366.51



## **CLAMP-ON MULTIMETERS**

Order No.	AC Amps Max	DC Amps Max	AC Volts Max	DC Volts Max	Ohms Max	Base Accuracy	Temperature Range	Jaw Capacity	Warranty	True RMS	Price
DL49	400	400	600	600	40M	±0.9%	-40-750°F	11/4"	3 yr	No	\$356.33
DL99	1,000	1,000	600	600	40k	±1.0%	-40-750°F	13/8"	3 yr	No	\$427.59
DL231	800	_	600	600	4k	±1%	-40-750°F	21/16"	5 yr	Yes	\$466.28
DL235	800	800	600	600	4k	±1%	-40-750°F	21/16"	5 yr	Yes	\$608.81
DL250	400	400uA DC	600	600	40M	±0.9%	-40-750°F	13/8"	3 yr	No	\$509.04

## MCP4 COMPACT CLAMP-ON TESTER

#### 11 RANGES

Features include: Color-coded scale plate and front panel; 11/4" jaw capacity; pointer lock switch; fuse protected ohms circuit; optional ~60–400°F temperature measurement with ATT28 temperature probe.

Scale Ranges						
Order No.	AC Amps	AC Volts	DC Volts	Resistance	Price	
MCP4	0-300A	0-750V	0-75V	1000 ohms	\$234.16	

Includes: Carrying case, test leads (ATL50), battery, fuse, and instructions.



## **UEI CLAMP-ON MULTIMETERS ACCESSORIES**

Order No.	Description	Price
AAC3	Alligator clip (screw-on)	\$8.14
AC319	Deluxe zippered soft case for DL49, DL39, MCP9A, MCP4	\$50.91
AC519	Deluxe zippered soft case for DL235, DL231, DL250, DL99, DL49, DL39, MCP9A and MCP4	\$61.09
AF155	Fuse 0.5A 660V, standard on DM384, DM383B	\$8.14
ATL55	Test leads for DL235, DL231, DL250, DL99, DL49, DL39	\$30.54
CA40	Features 1,000 Amps AC or DC, 2" jaw capacity, stretch cable extends more than 7 ft., Dual range for better resolution, low battery indicator, precision DC amps zero adjustment. For use with DM600, DM520, DL297T, DL295, DM384, DL293, DM383B, DM400, DL319, DM200 and DM5B.	\$335.97



## **UEI ATL SERIES TEST LEADS**

Order No.	Description	Price
ATL140	Rubber Insulated Test Leads for DL177, DL183, DL185, DL187T	\$26.47

#### **FUSES**

Order No.	Description (Pkg. of 3)	Price
AF112	Fuses for DL185, 187T, 183, 177 (2A, 600V)	\$12.22
AF113	Fuses for DL185, 187T, 183, 177 (15A, 600V)	\$28.51







## **UNIVERSAL ENTERPRISES**



## **UEI CIRCUIT BREAKER IDENTIFIER**

Order No.	Description	Price
CBF100	90–400 Volts AC operation, automatic range and sensitivity, power-on indicators in both the receiver and transmitter, loud and clear audible response tone, 9-V battery included	\$295.25



## **MA1 AC AMMETERS**

Application simplifies setting of oil/gas thermostats and heat anticipators.

SPECIFICATIONS
Accuracy: ±3% of full scale

Order No.	Description	Range	Price
MA1	High sensitivity direct reading.	0-1.2A	\$79.41