# THE BACHARACH BLUEBOOK 2011



# YOUR ONE SOURCE Serving the HVAC/R Industry











Leak Detectors A/C Refrigeration & Maintenance

**Fixed Gas Monitors** 

Safety & Specialty Products



### Welcome to Bacharach



## A CENTURY OF INNOVATION

### ...And We're Just Getting Started!

#### THE ONE SOURCE

Established in 1909, Bacharach, Inc. is the world leader in the design, manufacture, and service of advanced equipment to measure and detect gases including instruments that detect, measure and record combustion, refrigerant and environmental gases, temperature, humidity and other air quality and safety parameters.

- The ONE Source serving the HVAC/R industry for:
  - Combustion analyzers
  - Leak detectors (combustible & refrigerant gases)
  - Fixed gas monitors
  - A/C and refrigerant recovery machines, maintenance tools and gauges
  - Safety and specialty products
- Products designed to aid in the installation and servicing of heating, air conditioning & refrigeration equipment
- · Instruments designed for residential, commercial and industrial applications
- In-house product development and technical expertise
- Excellent customer support training, customer service, repairs
- Made in the U.S.A. for over 100 years

#### **LOOK FOR THESE SYMBOLS**

The capabilities needed for test and measurement instrumentation vary widely depending on the application and environment. To simplify your selection process, we have placed a symbol (©, ) and (1)) designating the most appropriate application use for the product;

- Residential: Homes, and apartments (furnaces, boilers, hot water heaters, air conditioners, and stoves)
  - Commercial: Institutions, office buildings, food storage, and labs (boilers, chillers, refrigeration racks, and indoor air quality)
  - Industrial: Manufacturing facilities, and utilities (health and safety monitoring, control processes, and emissions)



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### **SERVICE YOU CAN COUNT ON**

Factory Calibration, Sensor Replacement, and Repair Services are available and provide customers:

- Faster turnaround time
- Free return shipping
- · Simplified flat rate pricing

A Return Material Authorization number (RMA #) is required for all service and repair. For additional information go to MyBacharach.com/support.htm, contact Customer Service at 1-800-736-4666 or 724-334-5000 or send an email to: help@MyBacharach.com

### **BACHARACH SERVICE LOCATIONS**

### Bacharach® Sales/Service Center HEADQUARTERS:

HEADQUARTERS: 621 Hunt Valley Circle New Kensington, PA 15068-7074

USA

Toll Free: 800-736-4666 Ph: 724-334-5000 Fax: 724-334-5704 Email: help@MyBacharach.com

For Factory Authorized Service locations, see website: MyBacharach.com

#### Bacharach® of Canada Sales/Service Center

20 Amber Street Unit #7 Markham, Ontario L3R 5P4 Canada

Ph: 905-470-8985 Fax: 905-470-8963

Toll Free in Canada: 800-328-5217 Email: bachcan@idirect.com





#### BACHARACH'S FYRITE® FAMILY OF COMBUSTION ANALYZERS

For the most comprehensive full featured family of combustion analyzers, check out the Fyrite® combustion analyzer products. From simple to sophisticated and from basic to multi-use, Fyrite® products set the performance standard in their class. These instruments provide unique features that will meet the needs of contractors whatever the application.

#### **B-SMART® SENSORS FOR THE FYRITE® INSIGHT® AND PCA®3**



B-Smart® Sensors are the newest addition to the Fyrite® Family, providing the customer some major advantages when using the Fyrite® INSIGHT® and PCA®3. This technology allows the user to replace pre-calibrated sensors in the field, thus eliminating the need to send it in for calibration.

The B-Smart® Sensor itself is only part of the equation, select the B-Smart® Calibration program that is right for you... then let us worry about the details. Bacharach will automatically send you the calibrated sensors.

### Sign up today, go to www.MyBacharach.com/bsmart

### THE B-SMART® ADVANTAGE

Self calibration	No field gas calibration	Save money
Plug and play sensors	Install the sensors yourself	Save time
your door	calibration	
sensors sent right to	your instrument for	No downtime
<b>B-Smart® factory-calibrated</b>	No need to return	
Features +	Advantages =	Benefits





ECA 450 (1)



Unlike any other industrial grade combustion efficiency and environmental analyzer on the market today, the ECA 450 conducts accurate combustion and emissions tests to ensure that industrial equipment is burning efficiently and environmental regulations are being met.

- · Industrial grade analyzer for both combustion efficiency and emissions analysis
- Generates and prints combustion efficiency and emissions reports
- Supports modular, field replaceable, sensors for  $O_2$ ,  $NO_1$ ,  $NO_2$ ,  $SO_2$ ,
- Expandable in field add or change sensors as your requirements change
- Ideal for sampling and monitoring furnaces, boilers and other industrial combustion equipment
- Comes standard in hard case, 12" sample probe assembly with 15' of hose and built-in printer

MEASUREMENT	RANGE
Primary/Ambient Air Temperature	–4° to 999° F (-20 to 537°C)
Stack Temperature	-4° to 2400° F (-20 to 1316°C)
Draft / Differential	-27.7 to +27.7 in. of H <sub>2</sub> 0
Oxygen (O₂)	0.0 to 20.9%
Carbon Monoxide (CO) (H <sub>2</sub> comp)	0 to 4,000 ppm
Carbon Monoxide (CO) (High Range)*	4,001 to 80,000 ppm
Nitric Oxide (NO)*	0 to 3,500 ppm
Nitrogen Dioxide (NO₂)*	U to 500 ppm
Sulfur Dioxide (SO₂)*	u tu 4,000 ppm
Combustible Gases (HC)*	0 to 5.00% (application dependent)

#### **SELECTABLE FUELS**

Natural Gas, Propane, Coal, Wood, Kerosene, Oil #2, Oil #4, Oil #5, Oil #6, Bagasse

,g	
CALCULATED RANGES	RANGE
Combustion Efficiency	0.1 to 100.0%
Evanos Air	0 to 2E00/
Carbon Dioxide (dry basis)	0 to fuel dependent maximum
$NO_x (NO_x = NO + NO_2)$	0 to 4,000 ppm
NO <sub>x</sub> referenced to % O <sub>2</sub>	0 to 17,000 ppm
CO referenced to % O <sub>2</sub>	0 to 99,999 ppm
NO referenced to % O₂	0 to 14,900 ppm
NO <sub>2</sub> referenced to % O <sub>2</sub>	0 to 2,100 ppm
SO <sub>2</sub> referenced to % O <sub>2</sub>	0 to 17,000 ppm

#### \* Optional

Two pumps are included. The first pump supplies gas sample to the sensors. The second pump supplies fresh air to purge the low range CO sensor when CO levels exceed 4000 ppm. Probe includes a standard probe and hose assembly equipped with a water trap, particulate filter, probe stop, 15 feet of hose and 12-inch probe tube.

OTHER SPECIFICATIONS			
Power	Universal AC adapter and an internal battery		
	pack. Adapter will accept input voltages		
	from 100 to 240V. Fully charged battery pack		
	provides a minimum of 8 hrs of operation		
Size	13.5" H x 18.5" W x 9" D		
	(34.3 cm x 47 cm x 22.9 cm)		
Weight	25 lbs (11.34 kg)		
Memory	Stores over 1000 test records		

160 x 160 (2.5 in. x 2.5 in.) Graphic Liquid Crystal Display 1 year (does not include probe) Warranty

#### ORDERING INFORMATION

0024-7221	ECA 450 Base Unit (O2, CO, Ts, Ta, DP)
0024-8400	ECA 450 with NO / NO <sub>2</sub> sensors and compact sample
	conditioner
0024-8401	ECA 450 with NO, NO <sub>2</sub> and SO <sub>2</sub> sensors and
	compact sample conditioner

#### **OPTIONAL ACCESSORIES** 0024-3024 24" Probe Assembly

0024-3025 36" Probe Assembly	•
0024-7224 Compact Sample Conditioner/Probe	•
0024-3035 24" High Temperature Probe Assembly	
0024-3036 36" High Temperature Probe Assembly	
0024-3037 48" High Temperature Probe Assembly	
0024-1124 20 Ft. Hose Extension with sample, draft and	•
thermocouple lines	
0024-1172 Water Trap/Filter Assembly (for Probe Assemblies)	•
0007-1644 Replacement Filters for Water Trap (pkg of 3)	•
0104-4027 Serial Cable DB 9M to DB 9F	•
0024-0980 Printer Paper (5 rolls)	•







## G PCA® 3

Bacharach's all new PCA®3 is the definitive combustion and emissions analyzer that enables fast and accurate measurement for on-demand or semi-continuous sampling of light industrial, institutional, commercial and residential furnaces, boilers and appliances. The PCA®3 uses unique B-Smart® sensor technology to save downtime and calibration costs.



- · Large full color graphic display with bright backlighting, zoom display and dimming mode
- Measures 02, stack temperature, primary/ambient temperature and pressure/draft
- Measures CO (hydrogen compensated) from 0–4,000 ppm Provides both CO measurement capability (for safety) and calculation of combustion efficiency
- Selectable fuels include natural gas, kerosene, propane, coal, #2, #4 and #6 fuel oil, wood, bagasse and digester gas
- Includes hard carrying case, rubber boot, 12" probe assembly, spare filters, 4 "AA" batteries, "smart" sensors (as ordered), USB cable and PC software



### PCA® 3 with Reporting Package Kits

Combine the PCA®3 with the IrDA printer and you have the perfect Reporting Package tool. All reporting package kits contain all items included with the instrument, plus the IrDA printer, USB cable and software.

MEASUREMENT RANGES	
Primary/Ambient Air Temperature	-4° to 999° F (-20 to 537°C)
Stack Temperature	-4° to 2192° F (-20 to 1200°C)
Oxygen $(O_2)$	0.1 to 20.9%
Carbon Monoxide (CO) (H <sub>2</sub> comp)	0 to 4,000 ppm
Carbon Monoxide (CO) (High Range)	4,001 to 20,000 ppm
Nitric Oxide	0 to 3,000 ppm
Nitrogen Dioxide	0 to 500 ppm
Sultur Dioxide	0 to 5,000 ppm
Draft / Differential Pressure	-72 to +72 INWC
CALCULATED RANGES	

2.4.1, 2	72 to . 72
CALCULATED RANGES	
Combustion Efficiency	0.1 to 100%
Excess Air	1.0 to 250%
Carbon Dioxide	0 to fuel dependent maximum
$NO_x (NO_x = NO + NO_2)$	0 to 3,500 ppm
NO <sub>x</sub> referenced to % O <sub>2</sub>	0 to 9,999 ppm
CO referenced to % O <sub>2</sub>	0 to 9,999 ppm
NO referenced to % O <sub>2</sub>	0 to 9,999 ppm
NO <sub>2</sub> referenced to % O <sub>2</sub>	0 to 9,999 ppm
SO <sub>2</sub> referenced to % O <sub>2</sub>	
CO/CO <sub>2</sub> referenced to % O <sub>2</sub>	0 to 9.999 ppm

Natural Gas, Propane, Coal, Wood, Kerosene, Oil #2, Oil #4, Oil #6,

	Bagasse and Digester Gas		
	OTHER SPECI	FICATIONS	
	Power	Four disposable AA alkaline batteries providing 10 hours of continuous operation. Optional universal AC Power Adapter	
	Size	9" h x 3" w x 2.5" d (22.9 cm x 7.6 cm x 6.3 cm)	
	Weight	1.4 lbs w/batteries (0.6 kg)	
	Memory	500 complete combustion test records	
Logged Memory 500 complete logg		500 complete logged combustion test records	
	Warranty	2 years on instrument; 1 year on O <sub>2</sub> sensor	

ORDERIN	IG INFORMATION		
N.AM P/N*	EU P/N** DESCRIPTION		
0024-8440	0024-8460 PCA®3 225 (O <sub>2</sub> , CO)		
0024-8441	0024-8461 PCA®3 235 (O <sub>2</sub> , CO, NO)		
0024-8442			
0024-8443	0024-8463 PCA®3 255 (O <sub>2</sub> , CO, SO <sub>2</sub> ) 0024-8464 PCA®3 265 (O <sub>2</sub> , CO, NO, NO <sub>2</sub> )		
0024-8444	0024-8464 PCA®3 265 (O <sub>2</sub> , CO, NO, NO <sub>2</sub> )		
0024-8445	0024-8465 PCA®3 275 (U2 CO NO SO2)		
0024-8446	0024-8466 PCA®3 285 (O₂, CO, NO, CO high)		
0024-8447	0024-8467 PCA®3 225 Kit (0₂ CO printer)		
0024-8448	0024-8468 PCA®3 235 Kit (O <sub>2</sub> , CO, NO, printer)		
0024-8449			
0024-8450	0024-8470 PCA®3 255 Kit (0 <sub>2</sub> , C0, SO <sub>2</sub> , printer) 0024-8471 PCA®3 265 Kit (0 <sub>2</sub> , C0, N0, NO <sub>2</sub> , printer)		
0024-8451	0024-8471 PCA®3 265 Kit (O <sub>2</sub> , CO, NO, NO <sub>2</sub> , printer)		
0024-8452	0024-8472 PCA®3 275 Kit (O <sub>2</sub> , CO, NO, SO <sub>2</sub> , printer)		
0024-8453	0024-8473 PCA®3 285 Kit (O <sub>2</sub> , CO, NO, CO high, printer)		
OPTIONA	AL ACCESSORIES		
0024-1400	IrDA Printer w/ Disposable Batteries (included w/ Reporting Pkg. Kit)		
0024-1254	Universal AC Power Adapter (110-240V)		
0024-7224	Compact Sample Conditioner***		
0024-3004	Replacement Probe Assembly (North American)		
0024-3053	Replacement Probe Assembly (European)		
0024-1124	20 ft Hose Extension with sample, draft and thermocouple lines		
0007-1644	Replacement Filter Element (pkg. of 3)		
0021-7006	True Spot® Smoke Tester		

- \*U.S.-based calculations
- \*\*European-based calculations
- \*\*\*Sample Conditioner is recommended when measuring NO2 and SO2 to ensure highest degree of measurement accuracy.











The Fyrite® INSIGHT® is the newest Bacharach Combustion Analyzer that redefines what a combustion analyzer should be. This lightweight, hand-held analyzer is five tools in one. An INSIGHT® will:

- Perform combustion efficiency testing for 8 different fuels
- Test CO ambient conditions
- Measure CO in flue and calculate CO air free
- Serve as a dual channel digital thermometer (Up to 999°F)
- Function as a digital manometer (draft, gas pressure, ESP, up to 100 INWC)

INSIGHT® employs Bacharach's new B-Smart® CO Sensor technology that eliminates the need to send in the instrument for calibration, saving the user time and most importantly; money.

Other major features include user diagnostics, LCD and PC-based software for information and communication needs.

- Five Tools in ONE!
- Self calibration and easy access to sensors
- User diagnostics
- O<sub>2</sub> sensor life indication
- Calibration reminders
- Graphic LCD display
- Customize with your company logo
- Includes hard carrying case, rubber boot, probe, spare filter, 4 "AA" batteries and

### Fyrite® INSIGHT® Reporting Package Kit

The INSIGHT® Reporting Package Kits contains all items included with the instrument, plus the IrDA printer, USB cable and software. It's a perfect tool for contractors.



B-Smart® Carbon Monoxide (CO) Sensors are the newest addition to the Fyrite® Family, providing the customer some major advantages when using the Fyrite® INSIGHT®. This technology allows the user to replace pre-calibrated sensors in the field, thus eliminating the need to send it in for calibration.

The B-Smart® Sensor itself is only part of the equation, select the B-Smart® Calibration program that is right for you... then let us worry about the details. Bacharach will automatically send you the calibrated sensor. For more information go to www.MyBacharach.com/bsmart.

<b>MEASUREMENT</b>		RANGE
Combustion Air/Ambi	ent Air Temperature	-4 to 600°F (-20 to 316°C)
Flue Gas Temperature		-4 to 1200°F (-20 to 649°C)
Oxvaen (O2)		0.0 to 20.9%
Carbon Monoxide (CC	))	0 to 2,000 ppm
Draft / Differential Pre		-100 to +100 INWC
CALCULATED RA	ANGES	RANGE
Combustion Efficience	/	0.1 to 100%
Carbon Dioxide		0.1 to a fuel dependent max.
		value in percent
Carbon Monoxide (air	free)	
Excess Air		0 to 250%
SELECTABLE FU		
		e,Oil #2, Oil #4, Oil #6
OTHER SPECIFIC		
Power	Four disposable	AA alkaline batteries (included)
Battery Life	Minimum of 20 h	nours, typical
Size	8.0"H x 3.6"W x 2.3	"D (51.61cm x 23.22 cm x 14.84 cm)
Weight	16 oz. with batte	ries (0.45 kg)
Warranty	2 years on instru	ment; 1 year on $O_2$ sensor

ORDERIN	IG INFORMATION
0024-8250	Fyrite® INSIGHT®
0024-8252	Fyrite® INSIGHT® - European Model*
0024-8251	Fyrite® INSIGHT® w/ Reporting Pkg Kit
	Fyrite® INSIGHT® Kit - European Model*
OPTIONA	AL ACCESSORIES
0024-1492	Fyrite® INSIGHT® Reporting Kit
0024-1400	IrDA Printer w/ Disposable Batteries (included w/ Reporting Pkg. Kit)
	Printer Paper (5 rolls)
0024-1254	Universal AC Power Adapter
0104-1797	Thermocouple 10 ft (combustion at temp.)
	Thermocouple 1in (ambient air temp)
	Differential Pressure & Temperature Kit
	Optional NO <sub>X</sub> Filter
0007-1644	Replacement Filter Element (pkg. of 3)

<sup>\*</sup>European-based calculations



BACHARACH

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## **Pyrite** Tech

Based on the same technology as the Fyrite® commercial units, the Fyrite® Tech is an affordable residential combustion analyzer that reduces service call time by providing accurate, electronic test results instantly. The Fyrite® Tech analyzers are easy to use: simply turn the unit on, select the fuel type (natural gas, oil, propane and kerosene), and insert the probe. It's that easy.



- Quick payback The Fyrite® Tech reduces service call time by providing accurate, electronic test results instantly.
- Accurate operation Tactile feedback from the instrument's keypad assures that the appropriate key has been pressed.
- Ergonomically designed The instrument is lightweight and fits in the palm of your hand, making it easy to handle.
- Long battery life Four alkaline batteries typically offer up to 18 hours of continuous operation with an automatic "power off" feature that saves energy.
- Low battery symbol indicator
- Purchase protection Our two-year warranty on each analyzer and its sensors ensures worry-free operation.
- Measures  $O_2$  (0-20.9%) and CO (0-2,000 ppm), stack temperature (0 to 999°F) and ambient temperature
- Calculates combustion efficiency, excess air, CO<sub>2</sub> and CO air

### Fyrite® Tech 60

Includes soft carrying case, 4 AA batteries, probe and instruction manual

### Fyrite® Tech 60 Kit

• Includes hard carrying case, rubber boot, 4 AA batteries, probe and instruction manual - with or without IrDA printer

### Fyrite® Starter Tech Kit

• Includes Fyrite® Tech 60, rubber boot, instruction manual, Driftrite® pocket gauge, True Spot® test kit and hard carrying case to fit it all

<b>MEASUREMEN</b>	T RANGES	RANGE
Ambient Air Tempera	ture	32 to 212°F (0 to 100°C)
Flue Gas Temperatur	е	0 to 999°F (-18 to 537°C)
Oxygen (O <sub>2</sub> )		0.0 to 20.9%
Carbon Monoxide (C		0 to 2,000 ppm
CALCULATED R		RANGE
Combustion Efficience	у	0.1 to 99.9%
Carbon Dioxide (CO <sub>2</sub> )		0.1 to a fuel dependent max.
		value in percent
Carbon Monoxide (ai	r free)	0 to 9,999 ppm
Excess Air		0 to 400%
SELECTABLE FU		
	#2 (F2), Propane (F3),	Kerosene (F4)
OTHER SPECIFIC	CATIONS	
Power	Four disposable AA a	Ikaline batteries (included)
Battery Life	Up to 18 hours of con	tinuous runtime, typical
Size	7 5"H x 3 1"W x 2 1"D	(48 39 cm v 20 cm v 13 55 cm)

16 oz. with batteries (0.45 kg)

2 years

ORDERIN	IG INFORMATION
0024-8217	Fyrite® Tech 60
0024-8266	Fyrite® Tech 60 European Model*
0024-8226	Fyrite ®Tech 60 Kit (no printer)
	Fyrite ®Tech 60 Kit (with printer)
	Fyrite® Tech 60 Starter Kit
	AL ACCESSORIES
0024-1400	IrDA Printer w/ Disposable Batteries
	Printer Paper (5 rolls)
0024-1310	Protective Boot with Magnet
	Hard Carrying Case
0019-7111	Angled Probe & Hose Assembly w/sample & thermocouple lines
0019-3265	Water Trap/ Filter Assembly (for Probe Assembly)
0007-1644	Replacement Filters for Water Trap (package of 3)
0024-7059	Calibration Kit (regulator and tubing only)
0051-1994	Calibration Gas (100 ppm CO)

<sup>\*</sup>European based calculations







## Fyrite® Classic







The Fyrite® Classic series includes fast, easy to use instruments for measuring carbon dioxide or oxygen. The units, while looking very similar, differ in construction and absorbing fluid. Each model is suitable for only the particular gas and measurement range for which it was manufactured. Accuracy of all Fyrite® Classic products is  $\pm 0.5\%$ .

#### **KEY FYRITE® CLASSIC FEATURES INCLUDE:**

- Broad measurement range
- Capable of being exposed to ambient temperatures from -30 to +150°F
- Withstands measurement gas temperatures up to 850°F



	M	EASUREMEI	NT CAPABILITIES
PART NUMBER	CO2	<b>0</b> <sub>2</sub>	APPLICATIONS
0010-5000 0010-5001*	0-20%	NA	Flue gas combustion tests and CO₂ tests of heat treating atmospheres
0010-5020 0010-5021*	0-20%	0-21%	All of the applications aove plus; oxygen deficiency testing, O <sub>2</sub> concentrations in hydrogen cooled generators and oil sealed inert gas transformers
0010-5053 0010-5083*	0-7.6%	NA	CO <sub>2</sub> tests of controlled atmospheres in fruit, vegetable, meat storage rooms, and incubator monitoring
0010-5054 0010-5084*	NA	0-7.6%	Oxygen determination in flammable gases; oxygen tests to check inertness of atmosphere in silos, fuel tanks, etc.
0010-5011 0010-5012*	NA	0-21%	Flue gas combustion tests, oxygen deficiency test. Checking oxygen concentrations in hydrogen cooled generators and oil sealed inert gas transformers
0010-5032 0010-5033*	0-60%	NA	Checking CO <sub>2</sub> in inert gas blankets in tankers and barges carrying gasoline and other combustibles; CO <sub>2</sub> tests on lime kilns, checking CO <sub>2</sub> in sewage plant digesters

### Fyrite® Classic Oil Kit

.0010-5022 20% NA 0010-5150\*

Includes: CO<sub>2</sub> indicator, True Spot Smoke
Tester, Oil Burner Smoke Scale, Fire Efficiency Finder,
Tempoint Dial Thermometer, MZF Draft Gauge and hard
carrying case

#### **OPTIONAL ACCESSORIES**

0010-5057 Refill fluid CO <sub>2</sub> (20% & 60%) – 3 bottles
0010-5100 Refill fluid CO <sub>2</sub> (7%) – 3 bottles
0010-5060 Refill fluid 0₂ (21% & 60%) – 3 bottles
0010-5103 Refill fluid 0 <sub>2</sub> (7%) – 3 bottles

<sup>\*</sup> Export Kit (shipped without fluid)

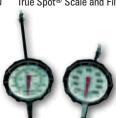


## Combustion Tools

## True Spot® Smoke Test Kit

- · Evaluates smoke density in the flue gases from distillate fuel
- · Accurate smoke readings take less than a minute
- Standard in the industry

0021-7006	True Spot®	Smoke Test Kit
0021-7012	True Spot®	lest Pump
0021-0018	Irue Spot®	Smoke Scale
UUZ 1-UU4U	Irue Spot®	Lupricant
0021-0019	True Spot®	Filter Paper Sheets (40 strips)
0021-0020	True Spot®	Scale and Filter Paper



## Tempoint®

0012-7014 6 in., 200°F to 1000°F 0021-7018 12 in., 200°F to 1000°F

### Draftrite® Pocket Gauge

 This pocket size draft instrument is suitable for checking flue pipe, chimneys, smoke hoods and oil burner firing rates

0013-3000	Draftrite® +0.10 to 0 to -0.14" WC
0013-3001	Draftrite® +0.05 to 0 to -0.25" WC
0013-5010	Draftrite® Tube Set



Note: All models supplied with two sections of draft tube and Leatherette Case 0013-0003.



Note: All models supplied with 5" draft tube and 9' of rubber tubing.

## MZF Draft Gauge

- · Requires no liquids or leveling
- Ideal for use in applications such as residential, commercial and industrial heating plants and for furnace draft pressure drop across filters

0013-7018	MZF Draft +1.0 to 0 to -5 mm WC
0013-7019	MZF Draft +0.05 to 0 to -0.25" WC
0013-7021	MZF Draft +0.05 to 0 to -1.0" WC

### Portable Manometer

A valuable instrument for measuring and adjusting the inlet and manifold pressure for gas heating equipment and appliances.

- The Bacharach Manometer is designed for accuracy, readability, and portability
- · Also used to determine filter resistance, fan efficiency, air velocity, and static pressures

0017-7000	Portable Manometer 0-15 INWC and 0-8.5 oz. per sq. in
	Portable Manometer 0-15 INWC and 0-38 cm WC
0017-0025	Portable Manometer Replacement fluid





Fyrite® Family of Products	Fyrite® Classic	Fyrite® Tech	Fyrite® INSIGHT®	PCA® 3	ECA 450
	8		6	F	
WHAT THEY DO	<b>BO</b>	R	RC.	<b>90</b>	0
Combustion Efficiency Analyzer	<b>~</b>	<b>.</b>	<u>Y</u>	<u> </u>	<b>y</b>
Room Air CO Test Instrument Flue Gas CO Test Instrument		<b></b>	······································		<b>Y</b>
Dual Channel Digital Thermometer			<b>V</b>	<b>V</b>	<b>~</b>
Digital Manometer			<b>Y</b>	~	<b>~</b>
Emissions Compliance Testing (NO, NO <sub>2</sub> , SO <sub>2</sub> )				······································	······································
WHAT THEY MEASURE					
Flue Gas Temperature		<b>y</b>	<b>y</b>	<b>~</b>	<b>v</b>
Combustion Air/Ambient Air Temperature		······································		······································	······································
Pressure (Draft, Gas Pressure, Static Pressure) Oxygen Levels (O <sub>2</sub> )	<b>✓</b>	~	······································	······································	· · · · · · · · · · · · · · · · · · ·
Carbon Monoxide (CO)		<b>y</b>	<b>Y</b>	<b>V</b>	<u> </u>
Carbon Monoxide (CO) High				······································	<b>Y</b>
Carbon Dioxide (CO <sub>2</sub> ) Nitric Oxide (NO)	<b>~</b>				
Nitrogen Dioxide (NO₂)				······································	······································
Sulfur Dioxide (SO <sub>2</sub> )				✓	<b>~</b>
Hydrocarbons (HC)					<b>~</b>
WHAT THEY CALCULATE					
Combustion Efficiency	w/ Slide Ruler	~	•	~	V
Excess Air		~	<b>v</b>	<b>~</b>	~
Carbon Monoxide Air Free (CO) Carbon Dioxide (CO <sub>2</sub> )		<b></b>	<u> </u>	······································	<b>Y</b>
		<b>v</b>		······································	
WHAT THEY TEST					
0il - #2	w/ Slide Ruler	·······	<b>.</b>	<b>v</b>	<b>~</b>
0il - #4 0il - #6	w/ Slide Ruler w/ Slide Ruler	······	······································		······································
Natural Gas. Propane, Kerosene	w/ Slide Ruler	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	·······	· · · · · · · · · · · · · · · · · · ·
Coal	w/ Slide Ruler		<b>V</b>	<b>V</b>	<b>~</b>
Bagasse				<i>y</i>	<b>~</b>
Digester Gas Wood				······································	
WHAT THEY FEATURE					
B-Smart® Sensors Field Replaceable Smart Sensors			<u> </u>	, , , , , , , , , , , , , , , , , , ,	
Graphic LCD Display			· · · · · · · · · · · · · · · · · · ·	✓ (color)	
Back Light		~	<b>V</b>	<b>~</b>	<b>v</b>
Zoom			· ·	<b>v</b>	
Data Logging Printing Capability			· · · · · · · · · · · · · · · · · · ·	······································	· · · · · · · · · · · · · · · · · · ·
PC Download Capability			<u> </u>	· ·	· ·
Sensor Life Indicator			<b>v</b>	<b>v</b>	
Calibration Reminder Automatic CO Over Range Protection			<u> </u>	<b>y</b>	
Warranty	1-year	2-years	2-years	✓ 2-years	2-years
WHAT CAN BE ADDED				4.5.77.7	1.7.7.7
True Spot® Smoke Test Kit	<b>v</b>	<b>v</b>	~	~	<b>~</b>
IrDA Printer/Built-In Printer Compact Sample Conditioner for Emission Compliance Testing		~	<b>~</b>	<i>y</i>	<i>y</i>
CERTIFICATIONS				······································	
EN50379					

### **Leak Detectors**





### **BACHARACH'S LEAK DETECTOR FAMILY OF PRODUCTS**

Bacharach manufacturers a complete line of leak detectors for combustible and refrigerant gases and one universal leak detector, the Informant® 2, that measures both types. Bacharach handheld portable units offer a wide range of visual and audible indicators, fast warm up and long battery life. Models are also available that are certified intrinsically safe for use in Class I, Division 1 Groups A,B, C and D hazardous locations. Designed for sensitivity and fast response, there is a Bacharach unit available to meet most any leak detection requirement.



### eak Detectors



### Informant® 2





The Informant® 2 is the only universal leak detector that can detect both combustible and refrigerant gases and is perfect for residential and commercial heating and cooling contractors.

#### The Bacharach Advantage:

- One-of-a-kind dual purpose refrigerant and combustible gas leak detector
- Automatically leads you directly to leak source
- Can swap sensor tips within seconds
- Sensitivity levels are automatically adjusted
- Refrigerant sensor tip is finely tapered to gain access to hard to reach areas



### Informant®2 Contractor Kit

 Instrument comes with refrigerant and combustible gas sensors, color-coded probe tips, instruction manual, protective rubber boot, 4"AA" batteries, 5 filters and hard carrying case



### Informant®2 Deluxe Kits

- Refrigerant and combustible leak detector
- Includes refrigerant and combustion sensors, color-coded probe tips, protective rubber boot, flashlight, 6"AA" batteries, 5 filters and hard carrying case

#### SENSING TECHNOLOGY

Refrigerant Sensor Heated Diode - U.S. Patent No. 5,932,176
Combustible Sensor Patented semiconductor type. Five year typical life.

Plug-in replacement

#### GASES DETECTED

Refrigerants 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, Fluorine or Bromine gas)

All combustible gases and vapors 0 to 400%

Combustible Gases A
RESPONSE TIME

Refrigerants and Combustible Gases Instantaneous

#### ALARM SENSITIVITY

Refrigerants
Less than 0.25 oz/yr of R-134a (hardest to detect refrigerant)

Combustible Gases Minimum 50ppm (Methane)

#### **ALARM TYPES**

Audible, dual visual LED's and flashing probe tip

#### OTHER SPECIFICATIONS

Power Four disposable AA alkaline batteries (included)
Battery Life 4-5 hours, under typical intermittent operation
Size 1.75"W x 9.6"L x 2.25"H (4.45 cm x 24.4 cm x 5.7 cm)
Weight 0.86 lbs. (0.39 kg) with batteries
Warranty One year, including sensors

#### CERTIFICATIONS

Refrigerants SAE J1627; CE Mark

Combustible Gases UL 913, intrinsically safe for use in Class 1, Division 1, Group D hazardous areas; CE Mark

#### ORDERING INFORMATION

0019-8038 Informant® 2 Contractor Kit
0019-8045 Informant® 2 Dual Sensor Deluxe Kit
0019-8040 Informant® 2 Refrigerant-only Kit (No Boot)
0019-8043 Informant® 2 Refrigerant-only Deluxe Kit
0019-8041 Informant® 2 Combustible Gas-only Kit (No Boot)
0019-8044 Informant® 2 Combustible Gas-only Deluxe Kit
ODTIONAL ACCESSORIES

<b>OPTIONA</b>	L ACCESSORIES
0019-8037	Deluxe Upgrade Kit (upgrade regular kits with rubber boot,
	MagLite® flashlight, 2 "AA" batteries and hard carrying case
0019-0499	Replacement Combustible Sensor
0019-0510	Replacement Refrigerant Sensor
0019-0509	Replacement Filters (pkg of 5)
0019-0497	Protective Rubber Boot
0006-9457	MagLite® flashlight
	MagLite® flashlight

### Leak Detectors







## Reakator® 10

0019-7051

- · Combustible gas leak detector
- Includes carrying case, gas sensor, flexible probe and instruction manual
- Visual 10 LED display
- Audible tick rate indicator
- Adjustable sensitivity
- 30 hour battery life
- UL 913 Intrinsically Safe for Class I, Division 1, Groups A, B, C and D hazardous locations; CE-Mark

0019-7063 Leakator®10 ETO for detection of Ethylene Oxide



#### **OPTIONAL ACCESSORIES**

0051-2529 Optional Earphone



## Leakator® Jr. R G





- 0019-7075
- · Combustible gas detector
- Includes sensor, soft case and batteries
- Visual On/Off LED display
- Audible tick rate indication
- Quick, 60 second warm up time
- Dual level sensitivity settings (20 and 50 ppm)
- UL 913 Intrinsically Safe for Class I, Division 1, Groups A, B, C and D hazardous locations; CE-Mark



0019-8106

- · Refrigerant gas leak detector at an affordable price for the budget conscious customer
- Instantly responsive to all refrigerants
- Includes hard carrying case and batteries
- Audible and visual alarms
- 10 second warm up
- SAE J1627; CE-Mark





### Tru Pointe® Ultra & Tru Pointe® Ultra HD 🛮 🕡 🕒





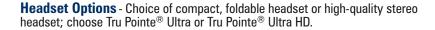




Bacharach's Tru Pointe® Ultra is a compact ultrasonic leak detector that uses patented technology to detect leaks in air conditioning and refrigeration systems. The Tru Pointe® Ultra is the world's first pocket-size electronic instrument that can simultaneously detect the vacuum and high pressure leaks that occur in HVAC/R systems. The Tru Pointe $^{\circledR}$  Ultra guides the user to a leak by quantifying the intensity of the ultrasound and converting it to a sound the user can hear easily through headphones.

#### The Bacharach Advantage:

- Not affected by wind or the presence of other gases or high concentrations
- Ten-step LED bar graph shows signal strength
- On-the-fly sensitivity adjustment aids in locating leaks quickly
- True sound reproduction ensures fast recognition of leaks
- · Finds small leaks instantly



**SoundBlaster**® - Ultrasonic Sound Generator. Artificially pressurizes rooms, tanks, enclosures with sound that the Tru Pointe® Ultra can detect thus locating where they leak air, water or other fluids or gases.

**Touch Probe** - Helps convert sounds within valves or solids to airborne sound for the Tru Pointe® Ultra to detect. (Patented).



#### **ELECTRICAL SPECIFICATIONS**

Airborne Sensor	
Sensitivity	-80dB/v-μbar
Ultrasound Convertor	••••••
Type	Analog Controlled Heterodyne
Frequency response,	
Airborne	34kHz to 42kHz
	4kHz
Heterodyne Oscillator	Analog
Controls	1 hutton
Sensitivity Control	Continually Variable Slide
Output, Audio	OHz to 4kHz
Output, Visual	10 Segment Bar Graph
Battery Type	9 Volt
Run Time	80-120 hrs

#### MECHANICAL SPECIFICATIONS

Size	5.5" x 2.4" x 0.8/5" (14 cm x 61 mm x 22.22 cm)
Weight	0.3 lb (138gr) Includes Battery
Audio Connector	3.5mm stereo
Warranty	1 year

#### **ORDERING INFORMATION**

0028-8000	Tru Pointe® Ultra Leak Detector Kit w/folding headset
0028-8010	Tru Pointe® Ultra Leak Detector Kit w/folding headset
	& Soundblaster®
0028-8001	Tru Pointe® Ultra HD Leak Detector Kit w/stereo headphones
0028-8011	Tru Pointe® Ultra HD Leak Detector Kit w/stereo headphones
	& Soundblaster®
0028-8006	Soundblaster® Ultrasonic Sound Generator

### **Vetectors**



## □ Tru Pointe® 1100 Ultrasonic Leak Detector Kit



The Tru Pointe® 1100 is a state-of-the-art digital ultrasonic inspection system for leak detection, mechanical inspection and troubleshooting. It accurately detects ultrasounds generated by leaks and pinpoints them at the speed of sound. It detects airborne leaks or electrical arcing in the frequency band of 34 kHz to 42 kHz and 16 kHz to 24 kHz for internal leaks or bearing wear using the patented internal Touch Probe sensor.

- Unaffected by the presence of other gases or sounds in the test area
- Includes high-quality noise attenuating headphones compatible with hard hats
- Unique AudioZoom<sup>™</sup> volume control

### Pointe® 2100 Ultrasonic Leak Detector Kit 🕡 🕒





The first of its kind, the Tru Pointe® 2100 uses two software-controlled sensors for the detection of airborne leak sounds and for the detection and location of solid-borne sounds from leaks and bearing wear. For ease of use and interpretation, the Tru Pointe® 2100 has two digital LED displays - a 20-segment bargraph display with peak-hold and an alphanumeric display for instrument settings and precision measurements. It's the most accurate and repeatable ultrasonic inspection instrument in its class.

- Capable of detecting a 5 PSI leak out of a 0.005" hole, 30' to 40' away (depending on background noise)
- Ideal for stream trap testing, detecting bearing wear, gas and valve leaks
- Capability of detecting ANY gas leaks, regardless of chemical property or concentration
- Capability of functioning like a stethoscope, using an industry-exclusive acoustic band, 0-10kHz



#### Tru Pointe® 1100 Specifications **AIRBORNE SENSOR SENSITIVITY** -80dB/v- $\mu$ bar

#### **ULTRASOUND CONVERTER TYPE**

Digitally Controlled Heterodyne

	Digitally Controlled II
FREQUENCY RE	SPONSE
Airborne	34kHz - 42kHz
Touch Probe	16kHz - 24kHz

OUTPU

OHz to 4kHz Audio

20 Segment Bar Graph with Peak-Hold & Separate Alphanumeric display

#### **ELECTRICAL SPECIFICATIONS**

Low Battery Indicator Digital Display: BATT Insuff. Battery Charge Automatic shutdown

#### **MECHANICAL SPECIFICATIONS**

Controls	4 Buttons (with AudioZoom™)
Power	9 Volt battery: provides 55-80 hrs. run time
Size	8.185" x 2.4" x 0.875" (20.78 cm x 6.1 cm x 2.22 cm)
Weight	0.5 lb. (233 g)
Audio Connector	3.5mm stereo
Warranty	1 vear

#### **ORDERING INFORMATION**

Tru Pointe® 1100 Ultrasonic Leak Detector Kit Tru Pointe® 1100 Ultrasonic Leak Detector Kit with 0028-8002 0028-8012 Soundblaster®

### Tru Pointe® 2100 Specifications

#### AIRBORNE SENSOR SENSITIVITY

-80dB/v-µbar

#### **ULTRASOUND CONVERTER TYPE**

Digitally Controlled Heterodyne

#### FREQUENCY RESPONSE

Airborne	AirHi: 34kHz - 42kHz	AirLo: 26kHz - 34kHz
Touch Probe	PbHi: 34kHz - 42kHz	PbLo: 16kHz - 24kHz
Touch Probe Sonic	PhS: N - 10kHz	* * * * * * * * * * * * * * * * * * * *

0Hz to 4kHz

20 Segment Bar Graph with Peak-Hold & Separate Alphanumeric display

#### **ELECTRICAL SPECIFICATIONS**

Low Battery Indicator Digital Display: BATT Insuff. Battery Charge Automatic shutdown

#### MECHANICAL SPECIFICATIONS

Controls	4 Buttons (with AudioZoom™)
Power	9 Volt battery: provides 55-80 hrs. run time
Size	8.185" x 2.4" x 0.875" (20.78 cm x 6.1 cm x 2.22 cm)
Weight	0.5 lb. (233 g)
Audio Connector	3.5mm stereo
Warranty	1 year Audio Connector 3 5mm stereo

#### ORDERING INFORMATION

0028-8003	Tru Pointe® 2100 Ultrasonic Leak Detector Kit
0028-8013	Tru Pointe® 2100 Ultrasonic Leak Detector Kit with
	Soundblaster®



### Leak Detectors





#### 3015-0627

- Refrigerant leak detector with dual power source that detects all CFC, HFC and HCFC
- Manual or automatic zero balance control
- Pass / fail test mode

- Unique sensor calibration system 3 sensitivity modes
  Powered by a rechargable battery
- Pinpoints both small and large leaks





- Refrigerant leak detector with automatic and manual adjustment
   Detects all CFC, HFC and HCFC refrigerants
   AC powered (120 VAC only)
   Performance exceeds SAE J1627
   Supplied with leak reference bettle probe tip and filter hit

- · Supplied with leak reference bottle, probe tip and filter kit



	H-10PM	H-10G							
SENSING TECHNOLOG	Υ								
Refrigerant Sensor	Positive Ion Emission He	eated Diode							
GASES DETECTED	GASES DETECTED								
Refrigerants	, ,								
RESPONSE TIME									
1 second									
ALARM SENSITIVITY									
R-134a	Small - 0.1 oz / y								
	Medium - 0.5 oz /								
<u></u>	Large - 2.0 oz / y								
R12	Small - 0.05 oz /								
	Medium - 0.1 oz /								
Accuracy	Large - 1.0 oz / y Exceeds SAE J1								
LEAK ALARM	EXCCCUS SAL 01	027							
Audible and visual	Visible LED lamp	Audible alarm and visible							
		neon lamp							
OTHER SPECIFICATION	NS								
Power	12 VDC - internal rechargeable	120 VAC 50/60 Hz							
	sealed lead acid battery								
	120 - 240 VAC universal battery charg	jer							
×	to charge or run unit continuously	2.5" x 4.5" x 8.5"							
Size		2.5" x 4.5" x 8.5"							
Weight	(14 cm x 26.67 cm x 21.6 cm)	(b.35 X 11.43 X 21.6 cm)							
Weight Probe Length	5 lbs. (2.27 kg) 4.5 ft (1.37 m)	4.5 ft (1.37 m)							
CERTIFICATIONS	4.5 10 (1.57 111)	4.5 ((1.57 111)							

ORDERING	INFORMATION
3015-0456	H-10PM All-In-One Leak Detector H-10G Standard Leak Detector
OPTIONAL	. ACCESSORIES
	Battery Charger for H-10PM, 120 - 240 VAC Universal (will charge or run unit)
3015-0103	Battery for H-10PM
3015-0326	14" Flovihla Proha
3015-0638	Standard Probe Assembly for H10G
3015-0486	Replacement Sensor
3015-0864	Leak Reference Bottle
3015-0641	Clear Probe TIP
3015-0781	Tune-Up Kit
	Rubber Probe Tip Probe w/LED for H-10PM

CE-Mark

### Detectors







### ( H25-IR

The H25-IR is an industrial-grade leak detection and measurement system. This instrument will locate, pinpoint and quantify the leak. Once a leak has been located it can be measured and the measured values can be logged and totaled for the entire system. This capability allows the user to ensure environmental or quality assurance compliance. This product can measure most refrigerant gases (over 40 in current library) as well as R-600a and SF<sub>6</sub>, which can be displayed in terms of leak rate (oz/yr, g/yr, mL/s, PaM3/s) or concentration (ppm). The long-life infrared sensor and high sensitivity make the H25-IR the smart choice for the most demanding leak detection and measurement applications.



Faster response time

- Infrared (IR) detection technology ensures long sensor life and high accuracy
- IR sensor is tuned specifically to target gas minimizes false alarms
- Internal leak source enables calibrations to be made quickly and easily
- Detects leaks as small as 0.03 oz/yr

ORDERING	INFORMATION
3015-5291	Refrigerants - Includes Smart Probe with 6' hose
3015-5292	Refrigerants - Includes Smart Probe with 12' hose
3015-5295	R600a - Includes Smart Probe with 6' hose
3015-5296	R600a - Includes Smart Probe with 12' hose
3015-5299	SF <sub>6</sub> - Includes Smart Probe with 6' hose
3015-5300	SF <sub>6</sub> - Includes Smart Probe with 12' hose

<sup>\*</sup> Additional models available that include a standard probe with LED and button

#### SENSING TECHNOLOGY

Non-Dispersive Infrared (NDIR)

#### GASES DETECTED

CFC, HFC, and HCFC unit: R-11, R-12, Refrigerants R-21, R-22, R-23, R-113, R-114, R-123, R-124, R-125, R-134a, R-227, R-236FA, R-245FA, R-401A, R-402A, R-402B, R-404A, R-407A, R-407C, R-408A, R-409A, R-410A, R-422A, R-422D, R-424A, R-426A, R-427A, R-500, R-502, R-503, R-507, R-508B, FA188, FC72,

H-1211, H-1234YF, H-1301, H-2402, HFP, N-1230 R-600a Isobutane

Sulfur hexafluoride (SF<sub>6</sub>)

#### TIME

With 6' probe hose attached

oz/yr, g/yr, mL/s, PaM3/s, ppm 0.03 - 5.00 oz/yr

Sensitivity 0.03 oz/yr

**WARM UP TIME** 

2 minutes

#### **OPERATING MODES**

Detects presence and location of gas Search Calculates and displays leak rate Measure

#### OPERATING TEMPERATURE RANGE

Storage Temperature Range 32 to 122°F (0 to 50°C) –4 to 122°F (–20 to 50°C)

Operating Humidity Range 5 to 90% RH, non-condensing

#### **OTHER SPECIFICATIONS**

100 to 240 VAC, 50/60 Hz Power Size 4"H x 10.75"W x 15"D (10.2 cm x 27.3 cm x 38.1 cm) Weight 18 lbs. (8.2 kg) Smart Probe, 6 foot Hose Probe Length Smart Probe, 12 foot Hose Warranty Two year full warranty on instrument



# Leak Detectors

Family of Products	Informant® 7	Leakator® 10	l nakatan® Ja	Tru Pointe®	H-10G	H-10PM	H25-IR
Idility of Froducts	Informant 2	reakator, in	Leakator Jr.	Iru Pointe*	טטו-ח	N-IUPM	UZJ-IK
WHAT THEY DETECT	RO	<b>B</b>	<b>RG</b>	<b>R</b> G	90	R	90
Combustible Gas Leak Detection	<b>~</b>		· · · · · · · · · · · · · · · · · · ·				
Refrigerant Leak Detection	······································			~	~	~	<b>V</b>
Specialty Gas Leak Detection							<b>~</b>
SENSITIVITY							
Refrigerant (oz/year of R134a)	0.2E			0.1	0.1	0.1	0.03
neifigerani (02/year of n 134a)	0.25			0.1	0.1		
Combustibles (ppm Methane)	50	20	20		(0.05 for R12)	(0.05 for R12)	(U.U1 for K12
Sensitivity Modes	Auto	Manual	20 2	2	3	3	3
Response Time		Instantaneous			1 sec	1 sec	0.5 - 1 se
•	instantaneous	instantaneous	~5 SEC 10 15	iiistaiitaiieous	1 366	1 360	0.5 - 1 36
WHAT THEY FEATURE							
Automatic Calibration and							
Zero Out Function	✓		<b>✓</b>	~	<b>✓</b>	~	<b>✓</b>
Replaceable Sensors	<b>Y</b>	~	~	~	Ž	Ž	Infrared
Warm Up Time (approx. in seconds)	10	10	60	10	120	120	120
Audible Alarm	<b>V</b>	~	<b>~</b>	<b>~</b>	~	~	<b>V</b>
Mute Option	<b>~</b>						Adj. Volum
Visual Alarm	<b>~</b>	<b>~</b>	~	~	<b>V</b>	<b>V</b>	<b>Y</b>
Hard Shell Case	<b>✓</b>	~		~	Self-	Self-	Self-
W					contained	contained	contained
Warranty	1-Year	1-Year	2-Years	1-Year	5-Year Lim.	5-Year Lim.	2-Year Lim
POWER SOURCE							
Battery Life (typical in hours)	5	30	14	15		3	8
Low Battery Indication	<b>~</b>	~	<b>~</b>	<b>~</b>		~	
Power Supply/Batteries	4 AA cell	5 C cell	4 AA cell	2 D cell	120 VAC	12 VDC	100 - 240
Tower Suppry/Datteries	alkaline	alkaline	alkaline	alkaline	(internal & external 120VAC)	VAC	VAC
CERTIFICATIONS							
UL 913 Intrinsically Safe							
Class I, Div. 1, Group D			.4				
CE Mark		· · · · · · · · · · · · · · · · · · ·					
SAE J 1627		~	<b></b>		<b>Y</b>	<b></b>	





### A/C, REFRIGERATION AND MAINTENANCE FAMILY OF PRODUCTS

Bacharach offers a complete line of rugged and durable refrigerant recovery machines designed for portability. These units simplify and speed up the recovery of most common refrigerants and are available to meet the requirements of residential, commercial and industrial work environments. In addition, Bacharach offers an A/C refrigeration and maintenance group of products to do the job, including vacuum pumps, scales, manifolds, and swaging and cutting kits.





## Stinger® RG





The Stinger® is one of the highest quality refrigerant recovery units on the market. Its powerful compressor will pump refrigerants at a quick pace while preventing pollutants from escaping into the environment. This A/C refrigerant recovery unit has been designed with R410A in mind in addition to other refrigerants, and is perfect for residential and light commercial contractors.

#### The Bacharach Advantage:

- Vacuum shut off allowing for unattended recovery operation
- Easy to read low vacuum/tank full LED
- Carrying strap
- Improved packaging protects knobs and gauges
- Larger compressor provides better heat dissipation on hot days, IMPORTANT
- High torque motor on compressor handles higher pressures under load
- One year over the counter warranty
- Handles almost all refrigerants
- Labeling on rear of unit with directions for proper connection
- Lightweight and compact

#### REFRIGERANT RECOVERY CAPABILITY

R-12, R-22, R-114, R134a, R-401A, R-401B, R-401C, R-402A, R-402B, R-404A, R-406A, R-407A, R-407B, R-407C, R-407D, R-408A, R-409A, R-410A, R-411A, R-411B, R-412A, R-500A, R-502B, R-507, R-509

#### RECOVERY RATES (ARI CERTIFIED)

Refigerant R-22 Vapor Recovery Rate: 0.29lbs./min. (0.13kg/min.) Liquid Recovery Rate: 3.53lbs./min. (1.60 kg/min.) Liquid Push / Pull: 12.28lbs./min. (5.58 kg/min.) Refrigerant R-134a Vapor Recovery Rate: 0.22lbs./min. (0.10 kg/min.) Liquid Recovery Rate: 2.66lbs./min. (1.21 kg/min.) Liquid Push / Pull: 10.96 lbs./min. (4.98 kg/min.) Refrigerant 410a Vapor Recovery Rate: 0.22lbs./min. (0.10 kg/min.) Liquid Recovery Rate: 3.00lbs./min. (1.37 kg/min.) Liquid Push / Pull: 14.58lbs./min. (6.63 kg/min.)

#### **VACUUM SPECIF ICATIONS**

0.8 HP High Performance Oil-less Compressor Type 15" Hg+ Vacuum Rating High Pressure Limit 550 PSI (37.9 bar)

#### OTHER SPECIFICATIONS

110/120 VAC, 1 Phase, 50/60 Hz, 8 Amps Power Source 220-230 VAC, 1 Phase, 50/60 Hz, 4 Amps 240 VAC, 1 Phase, 50/60 Hz, 5 Amps 24 lbs. (11 kg) 1 year, over-the-counter; 5 years on motor brushes

#### **ORDERING INFORMATION**

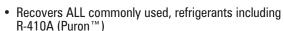
2006-3800 Stinger® Domestic 120V
2006-3801 Stinger® Domestic 120V w/ 80% Shut-Off
2006-3807 Stinger® European 220-230V
2006-3811 Stinger® European 220-230V w/ 80% Shut-Off
2006-3808 Stinger® AUS 240V
2090-0091 Optional 80% Shut-Off Kit





## MODEL 3600 / MODEL

For commercial refrigerant recovery applications, the rugged Model 3600 and Model 3700 are high performance machines with twice the capacity and faster recovery than competitive units. With 0.5 hp (Model 3600) or 1.0 hp (Model 3700) oil-less proprietary high performance compressors, these workhorses recover vapors nd liquids at unsurpassed ARI performance certified rates.



- 550 PSI high pressure cut-off, high pressure gauges
- LED system status display
- Rugged and reliable
- Automatic shut-off when evacuation is complete
- Self purge and vacuum shut-off
- Hi-low compressor head and valves
- Simple operation / purges clean
- Contains integrated sight glass
- 3/8" ports for faster, high-volume refrigerant recovery



		MODEL 3600	MODEL 3700
REFRIGERANT	RECOVERY CAPABIL	ITY	
Refrigerants		All refrigerants except R-11, R-	113 and R-123
SAMPLE RECO	VERY RATES (ARI CE	RTIFIED)	
R410A	Vapor Recovery Rate:	0.42 lbs./min. (0.19 kg/min.)	0.84 lbs./min. (0.38 kg/min.)
	Liquid Recovery Rate:	3.3 lbs./min. (1.5 kg/min.)	9.37 lbs./min. (4.25 kg/min.)
	Push/Pull Recovery Rate:	15.65 lbs./min (7.1 kg/min.)	53 lbs./min (24.04 kg/min.)
R22	Vapor Recovery Rate:	0.37 lbs./min. (0.17 kg/min.)	0.75 lbs./min. (0.34 kg/min.)
	Liquid Recovery Rate:	4.96 lbs./min. (2.25 kg/min.)	8.31 lbs./min. (3.77 kg/min.)
	Push/Pull Recovery Rate:	13.01 lbs./min (5.9 kg/min.)	50.51 lbs./min (22.91 kg/min.)
R134A	Vapor Recovery Rate:	0.29 lbs./min. (0.13 kg/min.)	0.57 lbs./min. (0.26 kg/min.)
	Liquid Recovery Rate:	3.86 lbs./min. (1.75 kg/min.)	6.12 lbs./min. (2.77 kg/min.)
	Push/Pull Recovery Rate:	11.84 lbs./min (5.37 kg/min.)	41.7 lbs./min (18.92 kg/min.)
<b>VACUUM SPEC</b>	IFICATIONS		
Compressor Type		0.5 HP High Performance	1.0 HP High Performance
		Oil-less Reciprocating	Oil-less Reciprocating
Vacuum Rating		13" Hg+	
High Pressure Limit		550 PSI (37.9 ba	ar)
<b>OTHER SPECIF</b>	ICATIONS		
Power Source		115 VAC, 50/60 I	Hz
		230 VAC, 50/60 I	
Weight		35 lbs. (15.9 kg)	47 lbs. (21.3 kg)
Dimensions		12" x 13" x 7.5"	12" x 14.25" x 8.75"
		(30.5 cm x 33 cm x 19 cm)	(30.5 cm x 36.2 cm x 22.3 cm)
Self Purging System		No hose change	es
80% Shut-Off		Optional	• • • • • • • • • • • • • • • • • • • •

#### **ORDERING INFORMATION**

2000-3600 Model 3600 410A Refrigerant Recovery Unit
2000-3601 Model 3600 410A-S Refrigerant Recovery Unit w/80% Shut-off
2000-3611 Model 3600 R-S Refrigerant Recovery Unit w/80% Shut-off Feature
2000-3700 Model 3700 Refrigerant Recovery Unit
2000-3707 Model 3700 Refrigerant Recovery Unit (European model)
2000-3701 Model 3700-S Refrigerant Recovery Unit w/80% Shut-off Feature
ODTIONAL ACCECCODY

#### OPTIONAL ACCESSORY

2002-0081 Optional 80% Shut-Off Kit



## R-22id (R) (G)







The R  $\,^{ullet}$  22id is a compact handheld refrigerant identifier that verifies the presence and quality of R22 refrigerant in HVAC/R air conditioning systems and tanks. It delivers fast and accurate refrigerant identification to avoid potential damage to your air conditioning service equipment and business from refrigerant contamination. With a simple, one button operation, system contents can be identified and verified in less than five minutes with automatic step-by-step indication of the gas sampling process.

#### The Bacharach Advantage:

- Compact and lightweight design
- Simple one-button operation
- Step-by-step user indication of gas sampling process
- Quick PASS or FAIL result

#### REFRIGERANT IDENTIFIER CAPABILITY

Detection Principle Non-Dispersive Infrared (NDIR); Single Detector Refrigerant

PASS/FAIL - 95% Pure R22 Accuracy

#### **OPERATING RANGES**

Operating

Temperature Range 50°-113°F (10°-45°C)

Operating

**Humidity Range** 0-95% RH Non-Condensing

#### **OTHER SPECIFICATIONS**

7" h x 4.25" w x 2.25 d (17.78 cm x 10.8 cm x 5.72 cm) Weight 2 lbs. (0.91 kg)
Body Materials Durable ABS Housing with Molded Rubber Boot Membrane Type Keypad with LED Visual User Interface Indicators and Function Key 9 Volt Alkaline (Optional 110/220 VAC) Certifications UL, CE Mark Warranty

#### **ORDERING INFORMATION**

2100-8000 R • 22id

2100-0001 R • 22id Oil Restrictor Hose and Brass Restrictor



## **Pur·Chek**™



Pur • Chek™ is smarter and faster than any refrigerant identifier used in the industry today. Its compact size and ergonomic design makes testing easy and it utilizes non-dispersive infrared (NDIR) technology to determine the weight concentrations of R12, R134A, R22, hydrocarbons, and air. It also features 'Blend-Chek' analytical software which quickly and accurately indicates the presence of R410A blend refrigerant.

- Accurately determines refrigerant purity
- Fast 60-second test time
- Large display clearly shows results
- Optional built-in printer

### Pur Chek Pro™ ®





The all new Pur • Chek™ Pro is the ultimate HVAC/R diagnostic refrigerant analyzer that enables fast and accurate testing of the widest range of refrigerants ever offered in a portable instrument. Pur • Chek™ Pro identifies more than a dozen HVAC/R refrigerants and provides a complete component breakdown of refrigerant blend ratios that can be printed out with the built-in printer.

- · Oil contamination resistant
- · Composition breakdown of more than a dozen refrigerants
- Internal thermal printer provides on-the-spot documentation
- Remote software updates for new refrigerants



#### Pur-Chek™ Specifications

#### **DETECTION PRINCIPAL**

Non-Dispersive Infrared (NDIR) Dual Detectors with **Dual Filters** 

#### REFRIGERANT

R12, R134A, R404A, R407C, R410A & Hydrocarbons Accuracy: +/-1% for measured refrigerants

#### OPERATING TEMPERATURE

40°-130°F (4°C - 54°C)

#### RESPONSE TIME

60 seconds

#### **TEST SAMPLE**

2100\_2001

5g per test / test pressure 50 psi - 500 psi Sample gas extraction: Pressure from cylinder or steam

#### OTHER SPECIFICATIONS

OTTILLI OF LOIL	IDAIIUIU
Sample Hose	R12 (¼" flare)
Power	110/220 VAC Power Adapter
	12-15V DC Optional Battery Pack (Internal)
Size	8.25" x 15.5" x 3.5" (20.95 cm x 39.37cm x 8.89 cm)
Weight	8 lbs. (3.63 kg)
Certifications	UL. cUL, CE Mark
Warranty	1 vear

#### ORDERING INFORMATION

Pur. Chak

2100-0001	i ui onek
2100-8002	Pur·Chek™ with Printer
OPTIONAL	ACCESSORIES
2100-0007	Optional Rechargeable Battery Kit for Pur·Chek™
2100-0012	Spare Rechargeable Battery Kit for Pur•Chek™
2100-0006	Replacement Sample Filter for Pur•Chek™
2100-0005	Pur • Chek™ Hose Assembly
2100-0003	Printer Paper for Pur • Chek™ (1 roll)

### Pur-Chek™ Pro Specifications

#### **DETECTION PRINCIPAL**

Non-Dispersive Infrared (NDIR) Single Detectors with 13 unique Filters

#### REFRIGERANT

R12, R134A, R404A, R407C, R410A, Hydrocarbons, & more. Accuracy: +/-1.2% for measured refrigerants

#### **OPERATING TEMPERATURE**

50°-113°F (10°C - 45°C)

#### **RESPONSE TIME**

<3 minutes

#### **TEST SAMPLE**

2100-8003

5g per test / test pressure 50 psi - 500 psi Sample gas extraction: Pressure from cylinder or steam

#### OTHER SPECIFICATIONS

Sample Hose	R12 (1/4" flare)
Power	110/220 VAC Power Adapter
	12-15V DC Optional Battery Pack (Internal)
Size	8.25" x 15.5" x 3.5" (20.95 cm x 39.37cm x 8.89 cm)
	8 lbs. (3.63 kg)
Certifications	UL. cUL, CE Mark
Warranty	1 year

#### ORDERING INFORMATION

Pur-Chek™ Pro

OPTIONAL	ACCESSORIES
2100-0007	Optional Rechargeable Battery Kit for Pur·Chek™ Pro
2100-0012	Spare Rechargeable Battery Pack for Pur Chek™Pro
2100-0006	Replacement Sample Filter for Pur·Chek™ Pro
2100-0008	Pur·Chek™ Pro Low Pressure Vapor Sample Hose
2100-0010	Pur·Chek™ Pro Low Pressure Sample Hose Filter
2100-0009	Pur·Chek™ Pro High Pressure Liquid Sample Hose Assy.
2100-0003	Printer Paper for Pur • Chek™ Pro (1 roll)



## **Maintenance Tools**

## Vacuum Pump

2002-0005

- QV5 (24.7lbs.) 5.3CFM
- Two stage rotary vane pump
- 1/4" and 3/8" flare and 1/2" ACME intake ports
- Light, compact and well balanced
- High performance vacuum, HP and CFM ratings for all A/C and refrigeration applications
- 110 VAC / 60 Hz
- One year warranty

2002-0001

QV2 (19.4lbs.) - 1.7CFM



## CS100 Charging Scale

2010-0000

- · Auto zero
- · Tethered display with flip-up stand
- Adjustable leveling feet with built-in level indicator
- Handles a wide range of both standard and recovery cylinders up to 330lbs (150 kg)

### **Manifold Sets**

2002-4000

 MS040 manifold set with sight glass R-12/22/134a with three hoses (R/Y/B) 60" length, brass manifold body, hanger hook, hose holder, two-handed wheels and 1/4" flare fittings. Gauge pressure: 0-250 PSI and 0-800 PSI. Hose pressure: 800 PSI Max W.P. and 2500 PSI burst pressure

2002-4300

 MS430 manifold set with sight glass R-410A with three hoses (R/Y/B) 60" length, brass manifold body, hanger hook, hose holder, two-handed wheels and 1/4" flare fittings. Gauge pressure: 0-500 PSI and 0-800 PSI. Hose pressure: 800 PSI Max W.P. and 4000 PSI burst pressure

2002-4350

- MS435 4-valve manifold R-410A
- 2002-4375
- MS437 4-valve manifold R-12/22/134a

2002-5000

 MS050 manifold set R-12/22/134a with three hoses (R/Y/B) 60" length, brass manifold body, hanger hook, hose holder, two-hand-wheels and 1/4" flare fittings. Gauge pressure: 0-250 PSI and 0-500 PSI. Hose pressure: 500 PSI Max W.P. and 2500 PSI burst pressure





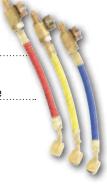
### **Ball Valve Hose Set**

2002-0003

 BV3 Ball Valve Hose Set R-12/22/134a with three hoses (R/Y/B), 6" length and 1/4" flare fittings, hose pressure: 500 PSI Max W.P. and 2500 PSI burst pressure

2002-0040

• BV410A Ball Valve Hose Set 410A with three hoses (R/Y/B), 6" length and 1/4" flare fittings, hose pressure: 800 PSI Max W.P. and 4000 PSI burst pressure



### Hose Set

2002-4700

 MS470 Hose Set R-12/22/134a with three hoses (R/Y/B) 60" length and 1/4" flare fitting. Hose pressure: 500 PSI Max W.P. and 2500 PSI burst pressure

## Flaring and Cutting Kit

2002-6400

HT1226 Flaring and Cutting Kit, includes (1) tubing cutter (1/8" to 1 1/8"), and (1) flaring tool (1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2" and 5/8") all in a hard carrying case

2002-6500

HT278 Flaring and Cutting Kit, includes (1) tubing cutter (1/8" to 1 1/8"), flaring tool with (2) flares (1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8" and 3/4"), (5) swaging adapters (3/16", 1/4", 5/16", 3/8", 1/2", 5/8" and 3/4") and (1) refrigeration wrench with 4 square openings (3/16", 1/4", 5/16", 3/8") all in a hard carrying case





Flaring Tool

2002-7100

 HT195 Flaring Tool (7 sizes) for 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", and 5/8" 0.D. tubing

## Swaging Punch

2002-7200

 HT95 Swaging Punch for 1/4", 5/16", 3/8" 1/2", and 5/8" 0.D. tubing



### Flaring and Burnishing Tool

2002-0525

 HT525 flaring and burnishing tool, for 3/16" to 5/8" O.D. tubing





### **Tubing Cutter**

2002-0780 • HT780 tubing cutter, capacity 1/8" to 7/8" 0.D. tubing

2002-1818 • HT1818 tubing cutter, aluminum alloy body, chrome plated with spare cutter wheel. Capacity 1/8" to 1 1/8" 0.D. tubing

2002-1858 • HT1858 tubing cutter, capacity 1/8" to 5/8" O.D. tubing

2002-1878 • HT1878 tubing cutter, zinc plated finish, capacity 1/8" to 5/8" O.D. tubing

## **Heavy Flaring Tool**

2002-7000

HT203 heavy flaring tool for 5/8", 3/4", 7/8" and 1 1/8"
 O.D. tubing





### Flaring Tool

2002-6100

 HT500 flaring tool for 3/16" 1/4", 5/16", 3/8", 1/2" and 5/8" 0.D. tubing

## **Humidity-Temperature Meter**

2002-1800

Humidity-temperature meter with case





## Telescopic Inspection Mirrors

2002-0300

HT3IM telescopic inspection mirrors, set of 4



## **PVC Pipe Cutter**

2002-2120 • HT212 PVC pipe cutter, capacity up to 1 5/8"



## Coupler

- Lowside R134A coupler
- 2002-1341
- Highside R134A coupler



### Valve Core Removal Tool

· HTVCRT double ended valve core removal tool



## Refrigeration Ratchet Wrench

2002-0112

 HTRW122 refrigeration ratchet wrench with 4 square openings, 3/16", 1/4", 5/16" and 3/8"

2002-0123

 HTRW123 refrigeration ratchet wrench with 3/16" and 1/4" square openings and 1/2" and 9/16" hex openings

**Capillary Cutter** 

2002-8000 HT128 capillary cutter





A/C Refrigeration Family of Products	Stinger"	MODEL 3600	MODEL 3700
WHAT THEY DO	RC	<b>G</b> (1)	
Recovers All Commonly Used Refrigerants Including R410A Recovers Vapor and Liquid	<b>V</b>	<u> </u>	~
HOW DO THEY WORK?			
Vacuum Shut-Off Switch Oil-less Compressor Single Piston Compressor	ž	Ž	Ž
Dual Piston Compressor Filter Dryer		FM3600R-S	<b>V</b>
SPEED OF RECOVERY (LB/MIN)-R410A			
Liquid Refrigerant Recovery Rate Vapor Refrigerant Recovery Rate	3.0 lbs/min .22 lbs/min	3.3 lbs/min .42 lbs/min	9.4 lbs/min .84 lbs/min
WHAT THEY FEATURE			
LED Status Light	✓	<b>~</b>	<b>~</b>
Carrying Strap	✓	✓	✓
Easy to Read Gauges	✓	✓	<b>~</b>
Weight	24 lbs	35 lbs	47 lbs
Size	11"H x 17"L x 9.5"W	12"H x 13"L x 7.5"W	12"H x 14.25"L x 8.75"W
Warranty	1-Year, Over the Counter 5-Years on Motor Brushes	1-Year	1-Year
NOWEN COUNCE	Wiotor Brusinos		
POWER SOURCE Power Source	110-120 VAC 1 Phase 50/60 HZ, 8 Amps 220-230 VAC	115 VAC 50/60 HZ, 230 VAC 50/60 HZ, 100 VAC 50/60 HZ	115 VAC 50/60 HZ 230 VAC 50/60 HZ, 100 VAC 50/60 HZ
WHAT CAN BE ADDED			
80% Tank Shut-Off	~	Comes standard with FM3600R-S	Comes standard with FM3700-S
CERTIFICATIONS			
ARI Performance Certification	✓	✓	<b>~</b>
CE Mark	✓	•••••	

### Fixed Gas Monitors





### BACHARACH'S GAS LEAK MONITOR FAMILY OF PRODUCTS

Bacharach refrigerant monitors provide a unique combination of high sensitivity, large dynamic measurement range and speed of response. Utilizing infrared technology, these single and multi-zone products allow customers point by point customization, remote communications, centralized reporting and maintenance. Mainly used to detect and monitor Halogen, Ammonia and Carbon Dioxide refrigerant gases found in mechanical rooms, grocery stores and manufacturing. These state-of-the-art products lead the industry in performance, cost of ownership, integration capabilities and cost. Bacharach's gas leak monitor family of products are compliant with ASHRAE standard 15-2007, ETL Energy Saving Listed and meets California Code Regulations for Refrigerant Monitors. Low level accuracy and detection limits respond to leaks when they are small, providing early warning for detection and repair; resulting in lower energy consumption as well as reduced refrigerant costs.



### Fixed Gas Monitors

## Single-Zone Gas Leak Monitor (HGM-SZ / AGM-SZ) 🕒 🕕







The HGM-SZ (Halogen Gas Monitor Single-Zone) is designed for continuous single-point monitoring of Ammonia, CFC, HFC, HCFC and Halon refrigerant gases. The HGM-SZ displays the type of gas being monitored, along with displaying both the current gas level and the peak gas level detected on its front panel LCD. The instrument retains a log of previous readings that can be easily accessed for analysis.

An internal audible alarm and front panel indicators are provided to signal alarm and fault conditions, and relay contacts can be used to trigger external alarm devices in the event of a system fault, or if a leak (small), spill (medium), or evacuation (large) level of gas is detected. The system also includes a 4-20 mA current loop interface that can be connected to remote monitoring equipment. Bacharach's gas leak monitor family of products are compliant with ASHRAE standards, 15-9994 and 15-2004, and meets California Code Regulations for Refrigerant Monitors.

#### SENSING TECHNOLOGY

Detector Single Pass, Non-dispersive Infrared (NDIR)

#### **GASES DETECTED**

HGM - SZ

R-11, R-12, R21, R-22, R-23, R-113, R-114, R-123 R-124, R125, R-134a, R-227, R236FA, R245Fa, R-401a, R-402a, R-402b, R-404a, R-407a, R407c, R-408a, R409a, R-410a, R422a, R422d, R424A, R426A, R427a, R-500, R-502, R-503, R-507, R508b, HFP, H-1211, H-1301, H-2402, N-1230,

FA188, FC72, HFO-1234YF Ammonia (NH3) - also known as R-717

#### **MEASUREMENT** RANGE / RESOLUTION

0 -10,000 ppm in 1 ppm increments 25 -10,000 ppm in 1 ppm increments All Refrigerants Ammon<u>ia</u>

#### OUTPUTS

Alarm Relays 3 ea. SPDT, 5 Amp, 240 VAC rated 1 ea. SPDT, 5 Amp, 240 VAC rated System Fault Relay Digital Display Output 1 dedicated 4-20 mA analog output (floating ground)

#### FRONT PANEL DISPLAY

3 Indicator Lights Green = Monitor is powered on. LED glows during normal operation; flashes when unit is in warm-up mode Red = Alarm. LED flashes when any point has exceeded the alarm setting Yellow = Fault. LED flashes when there is a system fault

#### COMMUNICATIONS

4-20 mA Analog Output

#### CATIONS

100 to 240 VAC, 50/60 Hz Power Dimensions 7.5"H x 13.5"W x 3.625"D (190.5 x 343 x 92 mm) Weight 5.5 lbs (2.5 kg.) Maximum Monitoring Distance Up to 500 feet from measuring point to monitor 2 Years

#### CERTIFICATIONS

UL 61010-1, CSA 22.2 No. 61010-1 EN14624 & CE Mark

- No costly calibrations required
- Single-zone gas leak refrigerant monitor
- Measurement range of 0-10,000 ppm
- Sensitivity to 1 ppm
- Provides continuous, unattended monitoring
- Capable of detecting and measuring any CFC, HFC or HCFC
- Can monitor a location up to 500 feet from display unit
- Other models are available that detect and monitor gases such as low range and high range  $CO_2$ , and Nitrous Oxide  $(N_2O)$

#### ORDERING INFORMATION

3015-4200	HGMSZ single-zone monitor (includes 1 termination
	filter, 50 ft. of 304-2742 sample line tubing and 50 ft. of
	304-2743 exhaust /purge line tubing)
3015-4280	AGMSZ single-zone monitor (includes 1 termination filter,
	50 ft.of 304-2742 sample line tubing and 50 ft.of 304-2743
	exhaust /purge line tubing)
3015-5529	Single-Zone Annual Maintenance Kit
3015-4992	MZ-RD Remote Display







## Multi-Zone Gas Leak Monitor (HGM-MZ / AGM-MZ / CO₂-MZ)

The Multi-Zone Gas Leak Monitor is a multiple area monitoring system for low level continuous monitoring of refrigerant gases used in most commercial systems including; CFC, HCFC, HFC, Ammonia and Carbon Dioxide. This state-of-the-art product leads the industry in performance, cost of ownership, integration capabilities and cost. Capable of detecting more than 35 refrigerant gases, the system design supports compliance to gas monitoring requirements of ANSI/ BSR ASHRAE 15-1994 and 15-2004, ETL Energy Saving Listed and meets California Code Regulations for Refrigerant Monitors.

Bacharach's HGM-MZ uses stable infrared detection technology, and therefore requires only minor periodic maintenance such as the occasional replacement of filters. The monitor incorporates active diagnostics that continuously check the system for proper operation. An audible alarm and front panel indicators are provided to signal alarm and fault conditions, and relay contacts are provided that can be used to trigger external alarm devices in the event of a system fault or preset gas level thresholds.



#### SENSING TECHNOLOGY

Single Pass, Non-dispersive Infrared (NDIR) Detector

#### **GASES DETECTE**

HGM - MZ R-11, R-12, R-22, R-23, R-113, R-114, R-123 R-124, R-134a, R-227, R236FA, R-401a, R-402a, R125, R-402b, R-404a, R-407a, R407c, R-408a, R409a, R-410a, R-500, R-502, R-503, R-507, R508b,

H-1211, H-1301, H-2404, N-1230

Ammonia (NH<sub>3</sub>) - also known as R-717 Carbon Dioxide (CO<sub>2</sub>) - also known as R-744 CO<sub>2</sub>-MZ

#### **RANGE / RESOLUTION MEASUREMENT**

0 -10,000 ppm in 1 ppm increments All Refrigerants Ammonia Carbon Dioxide 25 -10,000 ppm in 1 ppm increments 0 - 8,000 ppm in 1 ppm increments

#### **OUTPUTS**

Relays Four SPDT alarm contacts are provided (rated 5 Amps at 250 volts). Three assigned to ppm level

alarms, one assigned to system fault

#### FRONT PANEL DISPLAY

Green = Monitor is powered on, LED glows during 3 Indicator Lights normal operation; flashes when unit is in warm-up

mode

Red = Alarm. LED flashes when any point has exceeded the alarm setting
Yellow = Fault. LED flashes when there is a

system fault

#### COMMUNICATIONS

Full two-way communication with HGM-RD Display Module or Building Management System via RS-485 serial interface. RS-232C communication port standard

#### OTHER SPECIFICATIONS

100 to 240 VAC, 50/60 Hz. 20 W Power 12.23" H x 13.7" W x 4.96" D (78.9 cm x 88.39 cm x 40 cm) Dimensions Weight 15 lbs (6.80 kg) Maximum Monitoring

Distance Up to 1,200 feet, from measuring point to monitor Warranty 2 Years

CERTIFICATIONS

UL 61010-1, CSA 22.2 No. 61010-1 EN14624 & CE Mark

- No costly calibrations required
- Fastest response time in the industry
- Longest sampling distance of up to 1,200 feet
- Rapid identification of alarm type, leak size and location
- Monitors up to 16 zones with a maximum of 64 zones in combination with 4 monitors controlled by the Remote Display accessory unit
- Full two-way communications via RS-485

#### ORDERING INFORMATION

3015-5043	Halogen Gas Monitor 4 Zones
3015-5044	Halogen Gas Monitor 8 Zones
3015-5045	Halogen Gas Monitor 12 Zones
3015-5046	Halogen Gas Monitor 16 Zones
3015-5047	Ammonia Gas Monitor 4 Zones
3015-5048	Ammonia Gas Monitor 8 Zones
3015-5049	Ammonia Gas Monitor 12 Zones
3015-5050	Ammonia Gas Monitor 16 Zones
3015-5356	Carbon Dioxide Gas Monitor 4 Zones
3015-5357	Carbon Dioxide Gas Monitor 8 Zones
3015-5358	Carbon Dioxide Gas Monitor 12 Zones
3015-5359	Carbon Dioxide Gas Monitor 16 Zones

MULTI-ZON	IE KITS
3015-5330	Halogen Gas Monitor 4 Zones + Remote Display
3015-5331	Halogen Gas Monitor 8 Zones + Remote Display
3015-5332	Halogen Gas Monitor 12 Zones + Remote Display
3015-5333	Halogen Gas Monitor 16 Zones + Remote Display
3015-5334	Ammonia Gas Monitor 4 Zones + Remote Display
3015-5335	Ammonia Gas Monitor 8 Zones + Remote Display
3015-5336	Ammonia Gas Monitor 12 Zones + Remote Display
3015-5337	Ammonia Gas Monitor 16 Zones + Remote Display
3015-5338	Carbon Dioxide Gas Monitor 4 Zones + Remote Display
3015-5339	Carbon Dioxide Gas Monitor 8 Zones + Remote Display
3015-5340	Carbon Dioxide Gas Monitor 12 Zones + Remote Display
3015-5341	Carbon Dioxide Gas Monitor 16 Zones + Remote Display

#### **ACCESSORIES**

MZ-RD Remote Display (see page 34)

\*For Carbon Dioxide versions, call the factory for availability.





## Remote Display 🔾 🕕





The Remote Display (MZ-RD) is a Multi-Zone accessory that is placed in an alternate location from the MZ with access to the diagnostics, communications and control of the unit.

- Remote access to control room for Multi-Zone data and diagnostics
- Quickly identify and resolve potential system faults
- Rapid identification of alarm type, leak size, and location
- Can connect up to 4 Multi-Zones expanding zone coverage to 64

ADDITIONAL ACCESSORIES FOR THE MULTI-ZONE MONITORS		
HGM or AGN	Л	
	Multi-Zone Accessories	
3015-3411 BOTH	4 Zone Line End Filter Kit (4 line end filters)	
3015-3430 BOTH	R-22 Gas Verification Kit	
3015-3437 BOTH	K-134a Gas verification kit	
3015-3438 BOTH	R-123 Gas Verification Kit	
3015-3850 BOTH	103 L Cylinder, 100 PPM R-22	
3015-3851 BOTH	103 L Cylinder, 100 PPM R-134a	
3015-3852 BOTH	103 L Cylinder, 100 PPIVI K-123	
3015-5529 BOTH	Single-Zone Annual Maintenance Kit	
3015-5525 BOTH	Multi-Zone, 4 Zone Annual Maintenance Kit	
3015-5526 BOTH	Multi-Zone 8 Zone Annual Maintenance Kit	
3015-5527 BOTH	Multi-Zone, 12 Zone Annual Maintenance Kit	
3015-5528 BOTH	Multi-Zone, 16 Zone Annual Maintenance Kit	
3015-4121 BOTH	120 VAC Surge Protector	
3015-4123 BOTH	4-70 MA DL Surge Protector	
3015-5152 BOTH	Dual 4-20 mA DC Output Option (HGM/AGM/CO2-MZ)	
3015-4230 BOTH	N2 (JCI Metasys) Communications Package	
3015-4231 BOTH	Lon Works Communications Package	
3015-5171 BOTH	4 Zone Expansion Kit (max. of 3 per HGM300) Note: Must order M1110BN also.	
3015-4992 BOTH	4-20 mA Powered Remote Display (for MZ, must use with 3015-5152)	
3015-5512 BOTH	End-of-line Water Stop	
0007-1655 BOTH	Inline Water Trap	

ADDITIONAL ACCESSORIES FOR ALL MONTONS	
HGM or AGM	
	Single-Zone and Multi-Zone Accessories
3015-4121 BOTH	120 VAC Surge Protector
3015-4123 BOTH	4-20 mA DC Surge Protector
3015-3069 BOTH	Visual Alarm, 120 VAC
3015-3070 BOTH	Audio Alarm, 120 VAC
3015-3076 BOTH	Audio-Visual Alarm, 120 VAC
3015-5490 BOTH	Audible / Visual Alarm, Surface Mount, IP65 Rating, Red Lens, 24 VDC
3015-5491 BOTH	Audible / Visual Alarm, Panel Mount, IP54 Rating, Red Lens, 24 VDC
3015-5492 BOTH	Audible Alarm, Surface Mount, IP65 Rating, 24 VDC
3015-5493 BOTH	Audible Alarm, Panel Mount, IP54 Rating, 24 VDC

ADDITIONAL ACCESSORIES FOR ALL MONITORS

REPLACEMENT PARTS		
	Multi-Zone Replacement Parts	
0007-1650 BOTH	Hydrophobic Filter	
3015-2906 BOTH	Line Ford Filter Oak	
3015-3125 BOTH	Charcoal Filter Only Charcoal Filter Assembly with Fittings	
3015-5111 BOTH	Air Sample Tubing (250 ft. roll) AGM Air Sample Tubing (500 ft. roll) - Must use with AGM	
3015-3420 BOTH	Line End Fllter Assembly	
0007-1650 BOTH	Hydrophobic Filter (Single-Zone Only)	
3015-4306 BOTH	Charcoal Filter (Single-Zone only)	

### Safety & Specialty Products





### **BACHARACH'S SAFETY & SPECIALTY FAMILY OF PRODUCTS**

Bacharach's broad experience and exceptional capabilities in the design and manufacture of gas monitors and analyzers over the years has led to the development of many special purpose products. These products often serve as tools in safety systems as well as various areas of performance test and measurement. Following are a few examples of specialty Bacharach products. The instruments included in this section are designed for the measurement of carbon monoxide, carbon dioxide and sulfur hexafloride. These units serve unique purposes with a heavy emphasis on safety. Feel free to contact Bacharach if your monitoring need is out of the ordinary.

- Residential appliances, home inspection (CO)
- Food processing, pipe leak testing, flue gas (O2)
- Safety and indoor air quality (CO<sub>2</sub>)
- Incubators, medical gases (CO<sub>2</sub>)
- Horticulture, food processing (CO2)
- Air velocity and temperature meters



## Safety & Specialty Products







Bacharach's affordable Snifit monitors accurately measure carbon monoxide levels in a variety of applications. Small and lightweight, yet durable for service technicians, the Snifit quickly and precisely measures CO levels from 0-1,999 ppm. With simple-button operation the monitors are easy to use and maintain.

0019-7060

- · Ideal for ambient air safety checks on residential appliances, home inspection and HVAC Service
- Measures and displays Carbon Monoxide 0-1,999 ppm, 1 ppm resolution
  Small enough to fit in your pocket
  Backlight for low light conditions

- Three button operation
- Low battery indicator

#### SENSING TECHNOLOGY

Electrochemical sensor (CO)

#### GAS MEASURED / RANGE (RESOLUTION)

Carbon Monoxide 0-1999 ppm (in 1 ppm increments)

#### DISPLAY

Four-digit LCD display with backlight

#### **OPERATING TEMPERATURE**

Instrument 32°-104°F (0 - 40°C)

#### OTHER SPECIFICATIONS

One 9 volt battery Power 6 months with normal duty cycles Battery Life 5.5" H x 2.0" W x 1.57" L Size

(14 cm H x 5 cm W x 4 cm L)

Weight 8 oz (0.23kg) with battery

Warranty 1 Year



# Representation of the second s

Single gas monitors for Carbon Monoxide or Oxygen. Ideal for indoor air quality or food processing. These hand-held battery-operated monitors are versatile and easy to use. Each unit comes with a stainless steel probe assembly for remote sensing.

- Easy and affordable
- Full 4 digit display
- 18 hour battery life
- · Low battery symbol indicator

#### Monoxor® III:

- Measures CO levels between 0 and 2,000 ppm in ambient air and stack gasses
- Includes 4 AA batteries, probe and hose assembly, carrying strap, instruction manual and hard carrying case
- Monoxor® III Kit includes 8 AA batteries, probe and hose assembly, carrying strap, instruction manual, hard carrying case and IrDA printer

#### Oxor® III:

- Measures and displays O<sub>2</sub> levels between 0 and 20.9%
- Includes 4 AA batteries, probe, hose assembly and hard carrying case
- Oxor® III Kit includes 8 AA batteries, probe and hose assembly, carrying strap, instruction manual, hard carrying case and IrDA printer



### Monoxor® III Specifications

#### **SENSING TECHNOLOGY**

Electrochemical sensor

GASES MEASURED / RANGE (RESOLUTION)

Carbon Monoxide 0-2000 ppm (in 1 ppm increments)

**WARM-UP TIME** 

DISPLAY

10 or 60 seconds (depending on CO channel zero setup)

Four-digit LCD display with backlight

OPERATING TEMPERATURE
Instrument 32°-104°F (0 - 40°C)

Probe 1000°F (535°C) at 5" insertion

**OTHER SPECIFICATIONS** 

Power Four 'AA' alkaline batteries (included)
Battery Life Up to 18 hours continuous operation
Size 7.5" H x 3.1" W x 2.1" L (19cm H x 7.9cm W x 5.3cm L)
Weight 16 oz (0.45kg) with batteries

Warranty 2 years, including sensor

ORDERING INFORMATION

0019-8104 Monoxor® III CO Monitor 0019-8105 Monoxor® III CO Kit

**OPTIONAL ACCESSORIES** 

0024-1254 Universal AC Power Adapter
0024-1400 IrDA Printer w/ Disposable Batteries
0024-1229 IrDA Printer w/ Rechargeable Batteries
0024-1310 Printer Paper (5 rolls)
0007-1644 Filter Element for Water Trap (pkg of 3)

Oxor® III Specifications

SENSING TECHNOLOGY

Electrochemical sensor

**GASES MEASURED / RANGE (RESOLUTION)** 

Oxygen 0 - 20.9% (in 0.1% increments)

**WARM-UP TIME** 

90% of final value in 30 seconds

DISPLAY

Four-digit LCD display with backlight

OPERATING TEMPERATURE

Instrument 32°-104°F (0 - 40°C) Probe 1000°F (535°C) at 5" insertion

OTHER SPECIFICATIONS

 Power
 Four 'AA' alkaline batteries (included)

 Battery Life
 Up to 18 hours continuous operation

 Size
 7.5" H x 3.1" W x 2.1" L (19cm H x 7.9cm W x 5.3cm L)

 Weight
 16 oz (0.45kg) with batteries

 Warranty
 2 years - instrument; 1 year - sensor

**ORDERING INFORMATION** 

0019-8112 Oxor® III Oxygen Monitor 0019-8113 Oxor® III Oxygen Kit

OPTIONAL ACCESSORIES

 0024-1254
 Universal AC Power Adapter

 0024-1400
 IrDA Printer w/Disposable Batteries

 0024-1229
 IrDA Printer w/ Rechargeable Batteries

 0024-1310
 Printer Paper (5 rolls)

0007-1644 Filter Element for Water Trap (pkg of 3) 0011-0121 Wool Saturator for Probe Tube (pkg of 10)



# IEQ Chek™ Indoor Environmental Quality Monitor



IEQ Chek $^{\text{TM}}$  is a versatile multi-sensor instrument for measuring, monitoring and recording indoor environments for air quality diagnosis. With its 7-sensor capacity, the new IEQ Chek $^{\text{TM}}$  measures temperature, relative humidity, and up to 5 additional plug-and-play 'smart' sensors, including carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxygen (O<sub>2</sub>), formaldehyde (HCHO), total volatile organic compounds (TVOCs), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), ammonia (NH<sub>3</sub>), hydrogen sulfide (H<sub>2</sub>S) and combustible gases. Large multi-line backlit LCD display with simultaneous viewing of all installed sensors, battery life, pump indicator and calibration status.

- · Versatile handheld instrument with flexible 7-sensor capacity
- · Ideal for indoor environmental quality measurements
- On-board sensors for temperature and relative humidity; add up to 5 additional plug-and-play 'smart' sensors - available with on-board pump for sampling air
- · Stores over one million data points with SD flash card





# Comfort Chek™ 500 Portable Air Quality Monitor



Comfort Chek $^{\text{TM}}$  500 is an affordable, easy to use indoor air quality (IAQ) monitor designed with three sensors that simultaneously measure and record temperature, relative humidity, and carbon dioxide (CO<sub>2</sub>) levels in the air. It can collect up to 26,000 data points and store them in its internal flash memory. The large, backlit LCD displays all three sensor readings as well as battery status and provides easy readability in dark environments. Powered by alkaline batteries or with supplied wall adapter.

- Automatically calculates and displays MIN, MAX, STEL and TWA values for CO<sub>2</sub>
- Quick and easy calibration for CO<sub>2</sub> and RH
- Offers around the clock air quality monitoring in office environments or public facilities

## Comfort Chek<sup>™</sup> 500 Specifications

GASES DETECTED

Carbon Dioxide

#### **DETECTION PRINCIPLE**

Non-Dispersive Infrared (NDIR)

#### OTHER MEASUREMENTS

 $\begin{array}{lll} \text{Temperature} & 14^{\circ} \text{ F to } 140^{\circ} \text{ F } (-10^{\circ} \text{ C to } 60^{\circ} \text{ C}) \text{ } 0.1^{\circ} \text{ Resolution} \\ \text{Relative Humidity} & 0.99.9\% \text{ Non Condensing } / 0.1\% \text{ Resolution} \\ \text{Range Resolution} & \text{CO}_2 = 0.5,000 \text{ ppm } / 1 \text{ ppm increments} \\ \text{Accuracy} & \text{CO}_2 = \pm 30 \text{ ppm } \pm 5\% \text{ of reading} \\ \end{array}$ 

#### **OPERATING RANGES**

Temperature 32° F to 122° F (0° C to 50° C)
Humidity 0-95% RH Non-Condensing

#### **MECHANICAL SPECIFICATIONS**

 Warm Up Time
 30 seconds

 Power
 4 AA Alkaline Batteries - disposable only (included) 9 VDC 110 VAC Wall Adapter (N.Am. Plug) (included for power only - not for charging)

 Size
 6.6"x 2.75" x 1.25" (17 cm x 7 cm x 3.2 cm)

 Weight
 7.1 oz. (200 g) including batteries

 Certifications
 CE Mark

 Warranty
 2 years on instrument and CO₂ sensor

#### **ORDERING INFORMATION**

1580-8000 Comfort Chek™ 500 Kit (instrument comes with batteries, wall adapter (N.Am. plug), IQ Chek™ software and cable, user manual and hard carrying case)

1509-0007 Replacement Wall Adapter

### IEQ Chek™ Specifications

GASES DETECTED

See product description above

#### **DETECTION PRINCIPLE**

Non-Dispersive Infrared (NDIR), Electrochemical, Photoionization Detector (PID)

#### OTHER MEASUREMENTS

Temperature 23° F to 131° F (-5° C to 55° C) / 0.1° Resolution
Relative Humidity 0-99.9% Non-Condensing / 0.1% Resolution

#### **MECHANICAL SPECIFICATIONS**

Power 3 AA NiMH Rechargeable or Alkaline Batteries 6 VDC Power Adapter (N. Am. or Int'l.)

Size 7.75" x 3.87" x 3.06" (19.7 cm x 9.8 cm x 7.8 cm)

Weight 20 oz. (567 g) including batteries

Certifications CE Mark, EN 61010-1:2001, EM/RFI EN 50270:2006

Warranty 2 years on instrument, 1 year on CO<sub>2</sub> sensor

#### ORDERING INFORMATION

1510-1003	IEQ Chek <sup>™</sup> CO <sub>2</sub> (0-5,000 ppm), CO, Diffusion, Temp, RH
1510-1302	IEQ Chek** CO <sub>2</sub> (0-5,000 ppm), CO, NO <sub>2</sub> , Pump, Temp, RH
1520-0001	IEQ Chek™ CO2 (0-10,000 ppm), Diffusion, Temp, RH
1520-1002	IEQ Chek™ CO <sub>2</sub> (0-10,000 ppm), CO, Pump, Temp, RH
1540-0009	IEQ Chek™ CO <sub>2</sub> (0-20% vol), Pump, Remote Sample Probes
	for Temp, RH and installed "Smart" sensors
1540-2009	IEQ Chek™ CO2 (0-20% vol), O2, Pump, Remote Sample
	Probes for Temp, RH and installed "Smart" sensors
1509-0001	IQ Chek™ DataLogging Option (Includes 2GB flash card,
	cable, software & SD card reader)
1509-0003	Remote Sample Probe IEQ Chek™ 'Smart' Sensor readings
	(Not including Temp. & RH)

<sup>\*</sup>For all sensor configurations, call the factory or go to: www.mybacharach.com/ieq-chek.htm







# 🔾 🕕 Portable Area Gas Monitor

Bacharach's Portable Area Gas Monitor is an advanced instrument using non-dispersive infrared (IR) technology which provides superior stability and repeatability. The unit can provide readings in either parts per million (ppm) or elapsed time weighted average (TWA) with a resolution down to 1 ppm. The internal pump and self-contained purge-air bag provides a constant zero enabling the monitor to be used in contaminated environments without affecting the readings of the target gas. Additional features include datalogging of up to 200 readings, and a leak check mode with audible and visual alarms.

- This area gas monitor ultizes infrared technology for detection and measurement of gases including SF<sub>6</sub>, N<sub>2</sub>0, and refrigerants
- Seeks out low-level leaks with display and alarm
- Download and print capabilities
- Applications include refrigerant gas detection, safe entry, and medical monitoring
- Two year warranty
- Instrument comes with battery pack, charger and soft case

#### SENSING TECHNOLOGY

Non-Dispersive Infrared (NDIR)

#### **GASES DETECTED**

Refrigerants

CFC, HFC, and HCFC unit: R-11, R-12, R-21, R-22, R-23, R-113, R-114, R-123, R-124, R-125, R-134a, R-227, R-236FA, R-245FA, R-401A, R-402A, R-402B, R-404A, R-407A, R-407C, R-408A, R-409A, R-410A, R-422A, R-422D, R-424A, R-426A, R-427A, R-500, R-502, R-503, R-507, R-508B, FA188, FC72, H-1211, H-1234YF, H-1301, H-2402, HFP, N-1230

Sulfur Hexafloride (SF<sub>6</sub>) Nitrous Oxide (N₂O)

#### MEASUREMENT RANGE/ RESOLUTION

All Gases 0-1000 ppm in 1 ppm increments

#### **RESPONSE TIME**

90% of response within 5 seconds; 100% in 7 seconds

#### **WARM UP TIME**

15 minutes

### OTHER SPECIFICATIONS

	1110110
Internal Pump	1 lpm typical
Power	Li-lon rechargeable battery with battery life indicator
<b>Operating Temperature</b>	
Range	32 to 122°F (0 to 50°C)
Storage Temperature	
Range	-4 to 122°F (-20 to 50°C)
Operating Humidity	
Range	5 to 90% RH, non condensing
Size	8"D x 19"W x 5"H (20.3 cm x 48.3 cm x 12.7 cm)
Weight	6 lbs. 12oz (3.07 kg)
Leak Check Mode	Internal audible alarm, programmable
w/ Probe (+3 ft tubing)	Visual alarm indicator
,,,,	: : : : : : : : - :

#### ORDERING INFORMATION

3015-4484	Refrigerant Gases
3015-4790	Nitrous Oxide (N₂O)
	Sulfur Hexafloride (SF <sub>6</sub> )*
*Special Orde	r Only

2 Years (excluding contamination)



# IAO Tools



# Sling Psychrometer

The Sling Psychrometer accurately determines percent relative humidity without the necessity of consulting complex tables. The Sling Psychrometer contains a slide rule calculator which correlates wet and dry bulb thermometer indications for direct reading of relative humidity.

0012-7012	<ul> <li>+25°F to +120°F Red Spirit Filled</li> </ul>
0012-7043	-5° to +50°C Red Spirit Filled
0012-0266	
0012-0327	<ul> <li>Thermometer (-5° to +50°C Red Spirit Filled)</li> </ul>
0012-0011	Wick Replacement Kit - contains 4 wicks
0006-5456	• Cap

# Floret®

The Floret is an ideal pocket size air flow indicator for applications where readability to 50 ft/min is adequate. The Floret is a handy instrument that can be used for checking air flow through openings as small as 1/4" in diameter.

 Floret® Model, 0-1,000 FPM 0016-7009



# Anemometer Model TH4200



- 0-8,800 FPM
  - Coiled Cable Vane Head
  - Temperature: 32°F 140°F (0°C 60°C)
    Data hold and low battery indication

  - Sensitive for low/high air velocity
  - Also displays in Km/hr, Knots, M/S
  - Includes soft carrying case and battery



Safety & Specialty Products	Snifit®	Monoxor® III	Oxor® III	IEQ. Chek™	Comfort Chek™ 500
WHAT THEY DO		9			
Measure Indoor Air Quality	<b>~</b>	V	<b>Y</b>	<b>V</b>	V
Function as a Personal Protection Device Function as a Test Instrument	<b>y</b>			<b>V</b>	
runction as a fest instrument		<b>—</b>	<b>Y</b>	<b>—</b>	<u> </u>
WHAT THEY MEASURE					
Carbon Monoxide (CO)	0-1,999	0-2,000		0-50	
	PPM	PPM		PPM	
Carbon Dioxide (CO <sub>2</sub> )				0-5,000 ррм	0-5,000 ррм
				0-10,000 PPM 0-5% VOL	
				0-3% VOL 0-20% VOL	
				0-100% vol	
Oxygen (O <sub>2</sub> )	•••		0-20.9%	0-25% VOL	
Formaldehyde (HCHO)				0-10 ррм	0-5,000
Total Volatile Organic Compounds (TVOCs)				0-300 ррм	
Nitro con Diovido (NO.)				0-50 PPM	
Nitrogen Dioxide (NO₂) Nitric Oxide (NO)				0-5 PPM 0-100 PPM	
Nitrous Oxide (No)				0-100 PPIVI	
Sulfur Dioxide (SO <sub>2</sub> )				0-20 ррм	
Ammonia (NH <sub>3</sub> )				0-50 ррм	
Hydrogen Sulfide (H₂S)				0-50 ррм	
Combustible Gases				0-100% LEL	4.40.4.4005
Temperature				23°-131°F	14°-140°F
Relative Humidity				0-99.9%	0-99.9%
MEASUREMENT CHARACTERISTICS					
Response Time (Seconds to 90%)	<30	<40	<40	<40	30
Warm Up Time (Seconds)	30	10 or 60	60	240	30
WHAT THEY FEATURE	<u></u>				
Digital Readout of Measurement	Backlit	Backlit	Backlit	Backlit	Backlit
Visual Alarm Audible Alarm				<b>Y</b>	<b>y</b>
Datalogging				7	<u> </u>
Printer Port		IrDA	IrDA	USB	USB
Power Source	9V Alkaline	4 AA Alkaline	4 AA Alkaline	3 AA NiMH Rechargeable	4 AA Alkaline
Warranty	1-Year	2-Years	2-Years	Rechargeable 2-Years	2-Years
CERTIFICATIONS					
CE-MARK	~	<b>~</b>	<b>~</b>	~	~
EN 61010-1:2001				<b>Y</b>	
EM / RFI EN 50270:2006				<b>Y</b>	



# Accessories & Replacement Parts

REPLACEI	MENT SENSORS
0024-1467	B-Smart® Carbon Monoxide Sensor for Fyrite® INSIGHT®
0024-1541	B-Smart® Carbon Monoxide (CO) Sensor Med. for Fyrite® PCA®3
0024-1542	B-Smart® Carbon Monoxide (CO) Sensor High for Fyrite® PCA®3
0024-1543	B-Smart <sup>®</sup> Sulfur Dioxide (SO₂) Sensor for Fyrite <sup>®</sup> PCA®3
0024-1544	B-Smart <sup>®</sup> Nitrogen Dioxide (NO₂) Sensor for Fyrite <sup>®</sup> PCA®3
0024-1545	B-Smart® Nitric Oxide (NO) Sensor for Fyrite® PCA®3
0019-7061	Carbon Monoxide (CO) Sensor for Snifit®
0024-7265	Carbon Monoxide (CO) Sensor for Fyrite® INSIGHT®/Tech/Monoxor®III/Pro
0024-0997	Carbon Monoxide (CO) Sensor (High) for Fyrite® ECA 450/PCA®3/PCA®2
0024-0789	Carbon Monoxide (CO) Sensor (Low) for Fyrite® ECA 450/PCA®3/PCA®2
0024-1055	Combustible Sensor for Fyrite® ECA
0024-0881	Nitric Oxide (NO) Sensor for Fyrite® ECA/PCA®3/PCA®2
0024-1027	Nitrogen Dioxide (NO₂) Sensor for Fyrite® ECA/PCA®3/PCA®2
0024-0788	Oxygen (O₂) Sensor for Fyrite® ECA/PCA®3/PCA®2/INSIGHT®/PCA®
0024-8106	Oxygen (O₂) Sensor for Fyrite® Tech & Oxor®III/Pro
0024-0998	Sulfur Dioxide Sensor, SO <sub>2</sub> for Fyrite® ECA/PCA®3/PCA®2
0019-0499	Combustible Sensor for Informant® 2
0019-0575	Combustible Sensor for Leakator® Jr.
0019-0510	Refrigerant Sensor for Informant® 2
0019-0559	Refrigerant Sensor for Tru Pointe®
3015-0486	Refrigerant Sensor for H-10G & H-10PM
0019-0398	Sensor and Resistor for Leakator® 10
ACCECCO.	DIEC
ACCESSO	
0024-1124	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA®
0024-1124 3015-0119	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM
0024-1124 3015-0119 3015-0147	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G
0024-1124 3015-0119 3015-0147 0024-1254	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1470	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®2/INSIGHT®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1470 0024-1491	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Tech/Monoxor®III/Oxor® III
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1491 0024-0865	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Tech/Monoxor®III/Oxor® III Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Probe Stop - Universal for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1491 0024-0865 0024-8214	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Tech/Monoxor®III/Oxor® III Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Probe Stop - Universal for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1470 0024-1491 0024-0865 0024-8214 0019-3037	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Tech/Monoxor®III/Oxor® III Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT®
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1491 0024-0865 0024-8214 0019-3037 0024-1127	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Probe Stop - Universal for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Protective Rubber Boot with Magnet for Fyrite® Tech/Pro/Monoxor®III/Oxor® III Protective Rubber Boot with Magnet for Fyrite® Tech/Pro/Monoxor®III/Oxor® III Protective Rubber Boot with Magnet for Fyrite® PCA®3/PCA®2
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1470 0024-1491 0024-0865 0024-8214 0019-3037 0024-1127 0024-1409	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Iru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Tech/Monoxor®III/Oxor® III Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Probe Stop - Universal for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Protective Rubber Boot with Magnet for Fyrite® Tech/Pro/Monoxor®III/Oxor® III Protective Rubber Boot with Magnet for Fyrite® PCA®3/PCA®2/SORS@2 Serial Cable for ECA 450 Soft Carrying Case for Fyrite® Tech
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1491 0024-0865 0024-8214 0019-3037 0024-1127 0024-1409 0104-4027 0024-1267 0104-1798	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Tru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT® Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Probe Stop - Universal for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Protective Rubber Boot with Magnet for Fyrite® Tech/Pro/Monoxor®III/Oxor® III Protective Rubber Boot with Magnet for Fyrite® Tech/Pro/Monoxor®III/Oxor® III Protective Rubber Boot with Magnet for Fyrite® PCA®3/PCA®2 Serial Cable for ECA 450 Soft Carrying Case for Fyrite® Tech Thermocouple, 1' (for Ambient Air Temperature)
0024-1124 3015-0119 3015-0147 0024-1254 0024-1404 3015-3076 3015-0103 0019-0397 0019-0501 0024-7224 0024-1492 0024-1491 0024-0865 0024-8214 0019-3037 0024-1127 0024-1409 0104-4027 0024-1267	20' Hose Extensions (w/Sample, Draft & Thermocouple Lines) for ECA 450/PCA®3/PCA®2/PCA® Universal 120-240 VAC battery charger for H-10PM AC Adapter (240V) for H-10G AC Power Adapter (universal) for Fyrite® INSIGHT/Monoxor®III & Oxor® III/Pro AC Power Adapter (universal) Fyrite® PCA®3/PCA®2 Audio - Visual Alarm 120 VAC for HGM-MZ & HGM-SZ Battery for H10PM Carrying Case for Leakator ®10 Carrying Case for Iru Pointe® Compact Sample Conditioner/Probe Assembly for Fyrite® ECA 450/PCA®3/PCA®2 Fyrite® Recording Kit (Printer, CD and USB Cable) for Fyrite® INSIGHT® Fyrite® User Software CD for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Fyrite® User Software Kit (CD and USB Cable) for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Hard Carrying Case for Fyrite® PCA®3/PCA®2/INSIGHT®/Tech/Monoxor®III/Oxor® III Pressure Accessory Kit for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Probe Stop - Universal for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT® Protective Rubber Boot with Magnet for Fyrite® Tech/Pro/Monoxor®III/Oxor® III Protective Rubber Boot with Magnet for Fyrite® PCA®3/PCA®2/SORS@2 Serial Cable for ECA 450 Soft Carrying Case for Fyrite® Tech

# Accessories & Replacement Parts



0104-4032	USB Cable for Fyrite® PCA®3/PCA®2/INSIGHT®
0019-0553	Probe Assembly for Tru Pointe®
0019-3091	Probe Assembly for Leakator® 10
0019-0497	Protective Rubber Boot for Informant® 2
0024-8414	Thermocouple Kit, 12 inch for Fyrite® ECA 450/PCA®3/PCA®2/INSIGHT®
	IENT PARTS: FILTERS
3015-5199	Annual Maintenance Kit (1 internal Filter,1Charcoal Filter) for HGM-MZ
3015-4306	Charcoal Filter for HGM-SZ
3015-3125	Charcoal Filter with Fittings for HGM-MZ
0007-1654	Desiccant Filter for Portable Area Monitor
0007-1650	Hydrophobic Filter for HGM-MZ & HGM-SZ
3015-4415	Hydrophobic Filter for H25-IR
0007-1700	Inline Filter for Stinger®
0007-1563	Filter for Inlet of Gas Pump for Fyrite ®ECA 450/PCA®3/INSIGHT®
3015-3420	Line End Filter for HGM-MZ & HGM-SZ
0024-0987	Sensor Filter, CO (High) for Fyrite® ECA 450/PCA®3
0024-0863	Sensor Filter, CO (Low) for Fyrite® ECA 450/PCA®3
0024-0862	Sensor Filter, NO for Fyrite® ECA 450/PCA®3
0019-3265	Water Trap/Filter Assembly for Fyrite® PCA®3/INSIGHT®/Tech/Monoxor® III/0xor® III/PCA
0024-1172	Water Trap/Filter Assembly for Fyrite ECA 450
0019-3318	Moisture Removal Kit
3015-4515	Plastic Probe Tip Filter (Package of 10 ) for H25-IR
3015-4516	Plantia Proha Tin Eiltor /Pankaga of EO \ for U2E ID
3015-4680	— 4
3015-5135	Motel Busha Tin Filter (Paulone of FO) for USF ID
0019-0509	Filter 5 Pack for Informant® 2
0007-1598	Filter Element for Water Trap (Pkg. of 3)
0007-1550	Filter Element for Water Trap (1 kg. of 3) for Fyrite® ECA 450/PCA®3/INSIGHT®/Tech/Monoxor® III
0054-0548	Particulate Filter for Safe Entry Monitor
0034-0340	I diticulate i liter for Safe Littly Monitor
REPLACEN	IENT PARTS
3015-0326	14" Flexible Probe for H-10G & H-10PM
0019-0548	Battery Door for Tru Pointe®
0204-0020	Battery - AA Lithium
3015-0641	Clear Probe Tip for H-10G & H-10PM
0019-0507	Combustible Probe Tip Red for Informant® 2
2002-0011	Compressor Rebuilt Kit for FM3600/3700
0024-0878	Connector, Draft Female for Fyrite® ECA 450/PCA®3/INSIGHT®
	Connector, Gas Female or Fyrite® ECA 450/PCA®3/INSIGHT®
0024-0877	
2063-0010	High Pressure Gauge for FM3600/3700
3015-0864	Leak Reference Bottle for H-10G & H-10PM
2063-0020	Low Pressure Gauge for FM3600/3700
3015-0784	Maintenance Kit for H-10G & H-10PM
2014-0310	Pressure Switch for FM3600/3700
0024-3048	Pump Assembly for Fyrite® INSIGHT®
0024-3009	Pump Assembly for Fyrite® ECA 450



# Accessories & Replacement Parts

0024-3020	Pump Assembly for Fyrite®/Tech/Monoxor® III/Oxor® III
3015-5176	Pump with Connector for HGM-MZ & HGM-SZ
3015-4552	R-134 Leak Source Replacement Kit for H25-IR
3015-4553	R-600a Leak Source Replacement Kit for H25-IR
0010-5057	Refill Fluid CO2 20 & 60 % 3 Bottles Per Carton for Fyrite® Classic
0010-5100	Refill Fluid CO2 7% 3 Bottles Per Carton for Fyrite® Classic
0010-5100	Refill Fluid 02 21 & 60 % 3 Bottles Per Carton for Fyrite® Classic
0010-5000	Refill Fluid 02 7% 3 Bottles Per Carton for Fyrite® Classic
0010-3103	Refrigerant Probe Tip Blue for Informant® 2
0019-0473	Replacement Pump for Pro
0011-7052	Repair Kit CO2 20 & 60% for Fyrite® Classic
0011-7052	Repair Kit CO2 7% for Fyrite® Classic
0011-7053	Repair Kit CO2 7% for Fyrite® Classic
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0019-0577	Battery Door for Leakator® Jr.
0019-0576	Replacement Sensor Cover for Leakator® Jr.
3015-0680	Rubber Probe Tip for H-10G & H-10PM
0019-7114	Smart Probe Assembly with 12ft Probe Hose for H25-IR (gray)
0019-7132	Smart Probe Assembly with 6ft Probe Hose for H25-IR (black)
3015-0638	Standard Probe for H-10G & H-10PM
2063-0160	Stinger High Pressure Gauge
2063-0150	Stinger Low Pressure Gauge
2045-0620	Stinger Round Head Compressor
2039-0490	Stinger Round Head Compressor Over Haul Kit
2039-0480	Stinger Round Head Compressor Repair Kit Piston Cup, O-Rings
2045-0181	Stinger Square Head Compressor
2090-0042	Stinger Square Head Compressor Rebuild Kit
3015-0781	Tune-Up Kit for H-10G & H-10PM
CALIDDATIC	DN CAC
CALIBRATIO	
0051-1994	100 ppm CO, 103 L for Fyrite® PCA®2/INSIGHT/Tech/Monoxor® III/Snifit®
0024-1157	100 ppm NO2, 58 L for Fyrite® ECA 450/PCA®2
0024-1158	100 ppm SO2, 58 L for Fyrite® ECA 450/PCA®2
0024-0794	1,000 ppm CO, 1,000 ppm H2, 103 L for Fyrite® ECA 450/PCA®2
0051-1121	2.5% CH4, 103 L for Fyrite® ECA 450
0024-1156	250 ppm NO, 58 L for Fyrite® ECA 450/PCA®2
0024-1155	4000 ppm CO, 103 L for Fyrite® ECA 450/PCA®2
0024-0492	500 ppm CO, 103 L for Fyrite® ECA 450/PCA®2/INSIGHT®/Tech/Monoxor® III
0024-7059	Calibration Kit (Less Calibration Gas)
DDINITEDO	
PRINTERS	
0024-1229	IRDA Printer (Includes Battery Pack Charger, 1 Roll of Paper) for Fyrite® PCA®2/INSIGHT®/Tech/Portable Area
	Gas Monitors/Monoxor® III/Oxor ®III
0024-1400	IRDA Printer w/ Disposable Batteries
0024-0887	Printer Paper (1 Roll - HP Printer)
0024-8733	Printer Paper (1 Roll - IRDA Printer)
0024-1256	Printer Paper (5 Rolls - HP Printer)
0024-1310	Printer Paper (5 Rolls - IRDA Printer)
0024-0980	Printer Paper (5 Rolls) for Fyrite® ECA 450

# Shipping Weight & Dimensions



PRODUCT	SHIPPING WEIGHT	SHIPPING DIMENSIONS	PRODUCT	SHIPPING WEIGHT	SHIPPING DIMENSIONS
ECA 450	30 lbs.	18" x 13" x 10"	Infrared Thermometer	11 oz.	5.5" x 12.5" x 3"
PCA® 3, Fyrite® INSIGHT®	6.8 lbs.	17.5" x 6" x 13"	Digital Pocket Thermometer	2 oz.	3.5" x 9" x 1.5"
Fyrite® Tech	4 lbs.	17.8 x 6" x 18"	Refrigeration Wrenches (2002-0122)	5 oz.	2" x 8" x 1"
Fyrite® Duplex Kit	13 lbs.	13" x 6" x 11"	Refrigeration Wrenches (2002-0123)	8 oz.	2.5" x 9.5" x 1"
Fyrite® Fluid (1 carton of 3 bottles)	2 lbs.	10" x 5" x 4"	PVC Pipe Cutter	13 oz.	5" x 10.5" x 1.5"
Fyrite® Indicator	3 lbs.	10" x 5" x 4"	Valve Core Removal Tool	2 oz.	3" x 5" x 1"
Fyrite® Refill Package	2 lbs.	13" x 6" x 11"	Swaging Punch	1 oz.	2.5" x 9" x 1"
Fyrite® Repair Package	1 lb.	13"x 6" x 11"	Pocket Dial Thermometer	1 oz.	3" x 8.5" x 1"
Fyrite® Combustion Kit	15 lbs.	18" x 6" x 16"	R-410A Manifold Set	3 lbs. 8 oz.	12.5" x 14" x 2"
Draftrite® Draft Gauge	13 lbs.	4" x 3" x 1"	R-12/22/134a Manifold Set	3 lbs. 8 oz.	12.5" x 14" x 2"
True Spot® Smoke Tester	1 lb.	9" x 8" x 9"	R-12/22/134a Manifold Set	3 105. 0 02.	12.5 x 14 x 2
Monoxor® III, Oxor® III	3 lbs.	17" x 10" x 5"	w/Sight Glass	3 lbs. 8 oz.	12.5" x 14" x 2"
Multi Zone	3 ibs. 16 lbs.	25" x 18" x 14"	R-410A Manifold Set		
	3 lbs.	7" x 5" x 9"	w/Sight Glass	3 lbs. 8 oz.	12.5" x 14" x 2"
MZF Draft Gauge Snifit® 50		7 x 5 x 9 3" x 4" x 7"	R-410A Hose Set	1 lb. 14 oz.	12.5" x 14" x 2"
Snifft" 50 Informant® 2 Kit / Tru Pointe®	1 lb.	3 x 4 x / 4" x 3" x 12"	Spring Type Tubing Benders	2 lbs. 4 oz.	5" x 18.5" x 1.5"
, , , , , , , , , , , , , , , , , , , ,	3 lbs.		R-12/22/134a Ball Valve Hose Set	1 lb.	6" x 14" x 1"
Informant® 2 Deluxe Kit	4 lbs.	7" x 4" x 16"	3 in 1 Tubing Bender 180°	1 lb.	8" x 13" x 5"
Leakator® Jr.	1 lb.	13" x 8" x 5"	3 in 1 Tubing Bender 90°	15 oz.	4.5" x 13" x 2.5"
Leakator® 10	2 lbs.	9" x 2" x 2"	7 Sizes Flaring Kit	4 lbs. 6 oz.	8.5" x 6" x 1.5"
Tru Pointe® Ultra	1.5 lb.	11" x 14" x 4"	Flaring & Cutting Kit	3 lbs. 5 oz.	13" x 5.5" x 2"
Tru Pointe® 1100	2 lbs.	16" x 18" x 6.5"	Flaring, Swaging & Cutting Kit	5 lbs. 9 oz.	13" x 10" x 2"
Tru Pointe® 2100	2 lbs.	16" x 18" x 6.5"	Tube Expander Kit	9 lbs. 1 oz.	18" x 8" x 2.5"
Comfort Chek™ 500	2 lbs.	15" x 9" x 3"	R410A Gauge (2002-0410)	1/2 lb.	4.5" x 6" x 1.5"
IEQ Chek™	3 lbs.	9" x 12" x 4"	R410A Gauge (2002-0420)	1/2 lb.	4.5" x 6" x 1.5"
Floret® Air Velocity Meter	1 lb.	7" x 4" x 2"	R12/22/134a Gauge (2002-0250)	1/2 lb.	4.5" x 6" x 1.5"
Florite® Air Velocity Meter	4 lbs.	5" x 7" x 3"	R12/22/134a Gauge (2002-0550)	1/2 lb.	4.5" x 6" x 1.5"
Single Zone	5 lbs.	16" x 12" x 10"	6 Sizes Flaring Kit	2 lbs. 1 oz.	7.5" x 9.5" x 1.5"
Sling Psychrometer	1 lb.	12" x 9" x 6"	Heavy Flaring Kit	2 lbs. 5 oz.	9" x 8.5" x 1"
Stinger	28 lbs.	18" x 13" x 18"	Flaring Burnishing Tool	1 lb. 15 oz.	7.5" x 9.5 x 1.5"
Recovery Unit 3600-410A,			Tubing Cutter (2002-1858)	11 oz.	4" x 9" x 1.5"
Recovery Unit 3600 R-S	39 lbs.	18" x 13" x 18"	Tubing Cutter (2002-0780)	3 oz.	4" x 5" x 1"
Recovery Unit 3700	52 lbs.	18" x 13" x 18"	Tubing Cutter (2002-1878)	4 oz.	4" x 5" x 1"
H25-IR	18 lbs.	18" x 15" x 15"	Tubing Cutter (2002-1818)	4 oz.	4" x 5" x 1"
R22id	2 lbs.	9" x 9" x 9"	Telescopic Mirror Set	12 oz.	9" x 15.5" x 1"
Pur-Chek™	8 lbs.	16" x 16" x 7"	Capillary Tube Cutter	3 oz.	3" x 8" x 1"
Pur-Chek™ Pro	8 lbs.	16" x 16" x 7"	Fin Straightener	4 oz.	5" x 6" x 1"
Dual-Channel Digital Thermometer	14 oz.	7" x 12.5" x 2"	Inner Outer Reamer (2002-6900)	8 oz.	4.5" x 6" x 2"
Humidity-Temperature Meter	2 lbs.	18" x 15" x 15"	Inner Outer Reamer	8 oz.	4.5" x 6" x 2"
Anemometer	1 lb. 3 oz.	9" x 12.5" x 3"	Valve Core Removal Tool	2 oz.	3" x 5" x 1"
H10PM, H10G	7 lbs.	12" x 10" x 8"	Charging Scale	10 lbs. 10 oz.	17" x 15" x 4.5"
Tru Pointe®	3 lbs.	12 × 10 × 8	Sharging Codio	10 150. 10 02.	17 A 10 A T.U



## **Customer Service**

#### **CUSTOMER SERVICE**

Contact our Customer Service Department by phone, fax or e-mail. Your call will be answered by friendly, knowledgeable professionals Monday through Friday between 8 a.m. and 5 p.m. (EST). If you call during off-hours or if we are busy helping other customers, we encourage you to leave a message and we will return your call as quickly as possible. Please contact Bacharach according to your location and needs:

#### **USA**

To place orders or request a quotation: Phone: 1-800-736-4666 (press 1 at prompt)

724-334-5001 Fax:

E-Mail: Help@MyBacharach.com

For repair or service questions or to request an RMA#:

Phone: 1-800-736-4666 (press 2 at prompt) 724-334-5704

Fax:

E-Mail: Help@MyBacharach.com

For technical inquiries:

Phone: 1-800-736-4666 (press 3 at prompt)

724-334-5001 Fax:

E-Mail: Help@MyBacharach.com

#### **CANADA**

For all inquiries:

Phone: 1-800-328-5217 (toll-free in Canada)

905-470-8963 Fax:

E-Mail: bachcan@idirect.com

#### **OUTSIDE OF USA / CANADA**

To find a local distributor:

Phone: +1-724-334-5000 (press 4 at prompt)

Fax: +1-724-334-5705

E-Mail: Help@MyBacharach.com

#### REPRESENTATIVES AND DISTRIBUTORS

Bacharach has a worldwide network of partners anxious to handle your needs. Please contact Customer Service or go to www.My-Bacharach.com to find a representative serving your local area.

#### **PRICES AND TERMS**

Prices are subject to change without notice. Terms of payment are Net 30 Days with established credit (FOB Factory). The minimum order requirement is \$50.00 USD net. We also accept American Express, Visa, Mastercard and Discover or prepaid orders. Please see the Standard Terms and Conditions found at www.MyBacharach.com.

#### **GOVERNMENT CUSTOMERS**

Bacharach has been granted GSA Contract #GS-24F-1104B for Federal Supply Schedule 66. Product information is available in the GSA Advantage! Electronic Catalog on www.gsaadvantage.gov.

#### **WARRANTY**

Bacharach warrants all parts and components according to our standard Terms and Conditions, with provisions according to product warranties stated in the specific product Operating Instructions. Please complete the warranty registration card included with each instrument (return postage paid in USA), or complete the Warranty Registration Form found online at: www.MyBacharach.com/warranty-registration.htm.

#### **RETURNS**

All sales are considered final upon delivery by Bacharach to the initial carrier. Returns will be accepted only according to the Terms and Conditions with a Return Goods Authorization number (RGA#) issued by Bacharach.

#### **SERVICE AND REPAIR**

All service and repair of Bacharach equipment must be completed by an Authorized Service Center to uphold the Warranty. A Return Material Authorization number (RMA#) is required for all service and repair. For additional information please go to www.MyBacharach.com/support.htm or contact the Repair Department.

#### **DESIGN CHANGES**

Due to continuing improvements in design, some items may differ slightly from the description and photographs in the literature. All specifications are subject to change without notice. If you have product suggestions, please contact the Marketing Department via e-mail at Marketing@MyBacharach.com.

## **Global Distribution**



#### U.S.A.

#### **Bacharach World Headquarters**

621 Hunt Valley Circle New Kensington, PA 15068-7074 Toll Free: 1-800-736-4666

Tel: (724) 334-5000 Fax: (724) 334-5001 www.MyBacharach.com

#### **Bacharach Service Center - Pennsylvania**

621 Hunt Valley Circle

New Kensington, PA 15068-7074

Tel: (724) 334-5051 Fax: (724) 334-5704

Email: help@MyBacharach.com

#### CANADA

### Bacharach of Canada

Sales/Service Center - Ontario 20 Amber Street Unit #7 Markham, Ontario L3R 5P4, Canada Tel: (905) 470-8985

Fax: (905) 470-8963

Toll free in Canada: 800-328-5217 Email: bachcan@idirect.com

#### INTERNATIONAL

#### Mexico

#### **Gunder Y Socios International**

Vista Regia #412 Pte. Col. Linda Vista Guadalupe, N.L. Mexico C.P. 67130 Tel: 52-81-8394-3958 Fax: 52-81-8401-8592 Email: gunder@intercable.net www.gunderllc.com

#### Calfer De Mexico, S.A. De C.V.

Poniente 134 No. 404 Col. Nueva Vallejo 07750 Mexico D.F. Tel: 52-55-5078-1200 Fax: 52-55-5368-7925 E-mail: Bacharach@calfer.com.mx www.calfer.com.mx

#### Mexico Proveedora Mexicana De Controles, S.A. DE C.V.

Mauro Amarante #1033 Col. Balcones de Anahuac San Nicolas de los Garza, N.L. Tel: 52-81-8307-1202 al 05 Fax: 52-81-8307-1258 Email: gmartinez@pmc.com.mx

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### Japan TASCO Japan Co. Ltd.,

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#### HOMIS Controle e Instrumentacao Ltda.

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#### Maris Bros. Co.

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