

INFICON Service Tools

A Catalog for Service Professionals



D-TEK™

Outstanding Sensitivity in a Cordless Refrigerant Leak Detector.

The first true breakthrough in portable leak detection technology in decades. And the end of having to choose between inaccurate, unreliable battery-operated units and clumsy plug-in devices.

Rechargeable nickel cadmium power cells eliminate the inconvenience and hazards of a power cord. Heated-diode sensor technology offers quick response and exceptional resistance to

the effects of contamination. No need to baby it. No resetting for different refrigerants. Just turn it on and experience high-performance leak detection proven superior by independent tests.

To put the accuracy of a laboratory in your toolbox, contact your local D-TEK distributor.



The INFICON Electrochemical Heated-Diode Sensor (shown actual size) resists dirt, water, oil, and other contaminants, yet offers outstanding sensitivity— independent tests prove it (patent no. 5,284,569).



FEATURES AT A GLANCE

- Equal sensitivity to CFCs, HCFCs, and HFCs eliminates resetting or switching for different refrigerants— especially handy when you don't know what refrigerant you're dealing with.
- Variable-intensity audible signal grows stronger as you approach the leak, fainter as you move away from it, for fast, positive source identification.
- Yellow LEDs light progressively to show leak magnitude. Green LED "ON" Indicator begins flashing when charge is low, allowing plenty of time to recharge.
- High/Low sensitivity switch allows you to cut back sensitivity when close to the leak, making it easier to pinpoint its exact source.
- High-efficiency pump maintains continual flow of air through the sensor, for instantaneous reaction to ambient refrigerant and rapid recovery after leaving the scene of the leak.
- Flexible probe makes it easy to reach past obstructions, or check hard to reach places.
- Rubberized grip fits your hand for comfortable, secure operation.

SPECIFICATIONS

Minimum sensitivity to R12 and R134a	0.25 oz/yr. (7 g/yr.)
Controls	Power: On/Off Sensitivity: High/Low
Contamination adjustment	Automatic
Weight with power cells	1.28 lb (0.58 kg)
Weight without power cells	0.92 lb (0.42 kg)
Power options	<ul style="list-style-type: none"> • 110-volt AC adapter, 6' cord • 3 NiCd rechargeable power cells –1/2 D size for 6 hour continuous operation
Recharger	Built-in
Operating temperature range	+32°F to +122°F; 0°C to +50°C
Storage temperature range	+14°F to +140°F; -10°C to +60°C
Case material	Self-extinguishing, per UL94HB
Certifications	CE marking per Safety and EMC. SAEJ1627.
Warranty	2 years

D-TEK / ACCESSORIES

120-volt HVAC&R model	703-006-G1
120-volt Automotive model	703-005-G1
Carrying case, hard plastic	703-059-P1
Headphones	032-404
12-volt cord with battery clips	703-056-P1
12-volt cord with cigarette-lighter plug	703-055-P1
Replacement 110-volt adapter & cord	054-513
Replacement NiCd power cells (3/set)	703-057-G1
Replacement sensor	703-020-G1
Replacement tip filter kit	703-015-G1

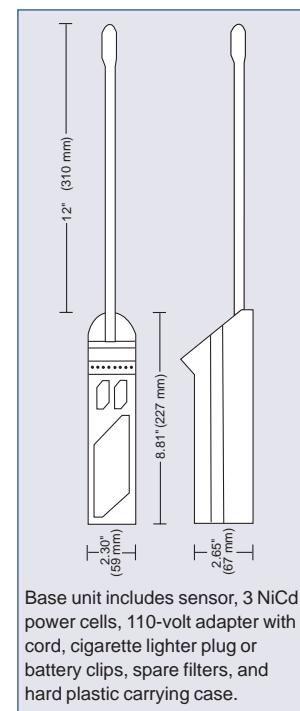
TECHNICAL NOTES

The INFICON D-TEK Refrigerant Leak Detector incorporates an electrochemical sensor consisting of a ceramic substrate, doped with a reactive element, and maintained at high temperature by a built-in heating element. When a halogen-bearing gas contacts with the hot surface, the chlorine, fluorine, or bromine atoms are separated from the molecule and ionized. This causes an electrical current to flow within the ceramic to a collection electrode at the center.

Careful selection and application of the ceramic permits the INFICON sensor to provide similar responses to CFCs (such as R11 and R12), HCFCs (such as R22 and R123), HFCs (such as R134a) as well as replacement blends

(such as R404A and R410A) so that the operator need not determine the refrigerant in use, nor remember to set a selector switch. Furthermore, when searching for HFCs, the instrument does not have an exaggerated response to traces of chlorine-bearing vapors which are frequently present.

The Automatic Background Compensation feature takes advantage of the heated sensor technology to continuously monitor and automatically compensate for changing background refrigerant levels ("noise") in the test area, without the need for manual adjustments by the operator.



TEK-Mate®

The Affordable, Portable Leak Detector.



If you're looking for a moderately priced, hand-held leak detector with proven D-TEK™ heated diode sensor technology—TEK-Mate is the tool for you.

Equal sensitivity to CFCs, HCFCs, and HFCs eliminates resetting or switching for different refrigerants. Automatically compensates for changing background contamination. And it's reliable, even under damp conditions.

TEK-Mate uses a variable intensity audible alarm and a single flashing LED to help pinpoint leaks. It's dependable for long-lasting performance on two D-size batteries.

SPECIFICATIONS

Base unit includes	Sensor, 2 D-size alkaline batteries, spare filters, and a hard plastic carrying case.
Sensitivity to CFCs, HCFCs, HFCs	0.4 oz/yr. (11 g/yr.)
Controls	3-position slide switch— off, low sensitivity, high sensitivity
Power	2 D-size (1.5-volt) alkaline batteries
Contamination adjustment	Automatic
Weight with batteries	1.54 lb (700 g)
Operating temperature range	+32°F to +113°F 0°C to +45°C
Probe	Chrome-plated flexible metal. Approximate length: 17" (43 cm)
Sampling system	Positive displacement pump
Certifications	CE marking per Safety and EMC. SAEJ1627.
Warranty	2 years

TEK-MATE / ACCESSORIES

TEK-Mate	705-202-G1
Sensor	703-020-G1
Filter kit	705-600-G1
Storage case	705-401-P2

Whisper™

Ultrasonic Leak Detector.

INFICON Whisper Ultrasonic Leak Detector is ideal for detecting and locating sources of ultrasonic sound through the use of sophisticated electronic circuitry. Unaffected by audible noise, Whisper incorporates an Internal Noise Control allowing for use in extremely noisy environments, such as mechanical rooms, and around operating

chillers. Because Whisper is designed to detect ultrasound at 40.5 kHz, not even a murmur will escape detection.

Use the optional transmitter for quick and accurate leak checking in walk-in coolers / freezers, wall and ceiling joints, around doors, windows, ducts, etc.



APPLICATIONS AT A GLANCE

- Refrigerant Leaks
- Locating Worn Bearings
- Leaks in Pneumatic Control Systems
- Leaks in Natural Gas, LPG Leaks
- Leaks in Compressed Air Systems
- Leaks in Vacuum Systems
- Butane / Propane Storage Tank Leaks
- Line Set Leaks in Foundations / Walls
- Diagnosing Solenoid Operations
- Steam Traps
- Electrical Arcing

SPECIFICATIONS

Base unit includes	9 V battery, rubber probe extension, headphones and storage case.
Controls	On / Off switch Sensitivity: maximum / minimum knob
Power	One 9 volt alkaline battery
Weight with battery	9 oz (0.25 kg)
Operating temperature	+32°F to +122°F; 0°C to +50°C
Storage Temperature	+14°F to +140°F; -10°C to +60°C
Warranty	2 years

WHISPER / ACCESSORIES

Whisper Ultrasonic Leak Detector	711-202-G1
Transmitter	711-600-G1
Headphones	032-404
Storage case	711-701-G1

GAS-Mate™

The Combustible Gas Leak Detector with High Sensitivity and Low Price.

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

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



FEATURES AT A GLANCE

- Sensitive to 5 ppm methane (twice as sensitive as nearest competitor)
- Also detects natural gas, propane, butane, cyclopentane, ethane, ethanol, isobutane and ammonia
- Variable audio alarm and flashing LED indicate leak strength
- Adjustable sensitivity helps pinpoint leaks fast
- Auto zeroing for ignoring background gas levels in leak test area
- Small sensor and probe tip permit leak checking in tighter places
- Runs continuously for 60 hours on two alkaline "D" cells
- 2-year replacement warranty

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

SPECIFICATIONS

Base unit includes	Sensor, two D-size alkaline batteries, and a hard plastic carrying case
Sensitivity to methane	5 ppm
Controls	3-position switch (off/high sensitivity/adjustable sensitivity); sensitivity slide switch
Power	2 D-size (1.5-volt) alkaline batteries (use Duracell® MN1300 to maintain intrinsically safe approval)
Battery life	60 hours
Probe	Chrome-plated flexible metal, approx. 17" (43 cm) long
Alarm indicators	Variable flashing yellow LED and audible tick rate dependent on gas concentration
Dimensions	8.8" x 2" x 3" (22.4 cm x 5.1 cm x 7.6 cm)
Weight with batteries	1.54 lbs. (700 gm.)
Operating temperature	+32°F to +113°F (0°C to +45°C)
Storage temperature	+14°F to +140°F (-10°C to +60°C)
Certifications	CE UL913 Class I, Division I, Group A, B, C and D, Met Laboratories Listing #E112145

GAS-Mate / ACCESSORIES

GAS-Mate	706-600-G1
Sensor	706-700-G1
Storage case	706-701-G1

Wey-TEK™

The Affordable, Accurate Refrigerant Charging Scale.

The Wey-TEK™ Refrigerant Charging Scale is an affordable, precision electronic scale that lets you easily weigh and charge from the same large platform. Its high-accuracy load cell gives the correct reading each time—no matter where the cylinder is on the weighing platform. The large LCD display is easy to see at a distance, even in direct sunlight. The optional charging module will allow you to turn your Wey-TEK scale into an automatic charging station.

Wey-TEK FEATURES

- precision-designed for refrigerant charging and recovery
- lightweight, modular design of high-impact foam-mold (no case required)
- large LCD display for easy viewing
- transfers all refrigerants by weight
- automatic and manual zeroing
- measures in lbs. or kgs.
- high-accuracy load cell won't drift
- simple on/off controls
- 1-year warranty
- made in the USA



CHARGING MODULE FEATURES

- charge / hold key allows interruption of the charging process
- displays target charge and total refrigerant transferred
- provides power to the scale
- programmable in 1/4 oz. increments
- 1/4" inlet and outlet flare fitting

SPECIFICATIONS

Wey-TEK Scale	
Weighing capacity	110 lbs. (50 kg.)
Accuracy	± 0.25 oz. (10 gm.)
Controls	On/Off, Zero Units selection (English/metric)
Power	9-volt alkaline battery
Display	LCD visible in direct sunlight Units: lbs./oz. or kg./gm. Low-battery indication Over-range indication
Scale zeroing	Auto with power-on; Manual
Weight	6 lbs. (2.7 kg.)
Dimensions (W x L x D)	12" x 16 3/4" x 1 3/4" (30.5 cm x 42.5 cm x 4.5 cm)
Operating temperature	+32°F to 122°F (0°C to +50°C)
Storage temperature	+14°F to 140°F (-10°C to +60°C)

Charging Module

Usage	Indoors or outdoors
Max. refrigerant transfer	110 lbs. (50 kg.)
Operating temperature	+32°F to 122°F (0°C to +50°C)
Storage temperature	+14°F to 140°F (-10°C to +60°C)
Input voltage range	12VDC ±5%
Input current	1.2 amps
Connection size	1/4" refrigerant flare
Weight (w/9V alkaline battery)	2.5 lbs. (1.1 kg.)

Wey-TEK & CHARGING MODULE / ACCESSORIES

Wey-TEK Scale	707-600-G1
Charging module HVAC&R	709-700-G1
Charging module automotive	709-700-G1A
Wey-TEK scale and charging module HVAC&R	707-700-G1
Wey-TEK scale and charging module automotive	707-700-G1A
Softsided case	707-404-P1

SHARK™ Vacuum Pump.



SHARK VACUUM PUMP

The INFICON SHARK Vacuum Pump is designed for the Service Professional for quick deep evacuation, simplified maintenance/repair, and durability.

SHARK is a two-stage rotary vane pump, with 6 cfm rated displacement for ultimate vacuum

down to 15 microns. The pump, with features such as a large oil capacity, gas ballast, internal oil pump, and fan, allow service technicians to make easier, more efficient service calls. The unique molded design of SHARK allows for easy carrying to the job while giving extraordinary durability.

SPECIFICATIONS

Base Unit	Self-contained, 110 volt operation. Includes power cord, 1qt. turbo oil T32, and user manual.
Free air displacement	6 cfm (170 liter/minute)
Vacuum pump design	Two-stage rotary vane
Motor	1/3 HP AC; 1700 RPM
Oil capacity	1.0 qt (0.95 liters)
Weight	24 lb (10.89 kg)
Dimensions (L x W x H)	19.6" x 11.8" x 7.1" (49.8 cm x 30.0 cm x 18.03 cm)
Warranty	1 year

SHARK / ACCESSORIES

SHARK	VNR-172-1
Turbo oil T32 (6 qts./case)	071-0730

FEATURES AT A GLANCE:

- Rotary Vane Two-Stage Pump – provides the ability to quickly pull a deep vacuum.
- Gas Ballast – allows pumped water vapor to be exhausted to atmosphere instead of accumulating in oil reservoir without affecting the vacuum pump's performance.
- Anti-suck Back On Inlet – prevents oil from entering system if a power disruption occurs.
- Large Oil Capacity – offers higher cooling for longer component life and greater moisture pumping capability.
- Internal Oil Pump – provides lubrication by throwing oil back on bearings and seal area increasing life expectancy of the vacuum pump.
- Replaceable One-Piece Cartridge – allows the HVAC/R professional to repair the vacuum pump without any hassles.
- Fan – directs airflow for maximum surface area heat transfer keeping unit cooler.
- Bigger Bearings – 1" shaft supports cartridge and ensures pump lasts longer.
- Molded Plastic Housing – unique design offering durability, ease of maintenance, and convenience.
- Oil Trapping Exhaust Filter – minimizes oil loss through the exhaust system and prevents oil accumulation on pump.

Pilot™ Vacuum Gauge

Accurately Measures the Entire Vacuum Cycle .

With its technologically advanced Pirani sensor, the INFICON Pilot Vacuum Gauge works throughout the entire evacuation process of air conditioning or refrigeration systems. Its easy-to-read digital display accurately shows the vacuum level at every stage in the evacuation cycle, from atmosphere down to one micron. Using the Pilot Vacuum Gauge, there's no waiting until the pumping process is well underway before you know whether your connections are tight.



And that's the problem with vacuum gauges currently being used. If your gauge or pump is not properly connected to the system, you may never get down to the vacuum level required to get a reading on your gauge. Unlike these gauges, Pilot works at atmosphere, so you'll know right away if a vacuum is being pulled properly.

SPECIFICATIONS

Base unit	Includes 9-volt battery, storage case, and manual.
Weight (with battery)	7.25 oz (0.2 kg)
Power source	9-volt battery
Refrigeration fitting	1/4" male flare
Controls	On/Off/Unit Selection Button
Display units	microns, Pascal, millibars
Display range	atm (760,000 microns) to 1 micron
Auto shut-off	After 15 min; last reading displayed when restarted
Accuracy	< 20,000 microns $\pm 5\%$, > 20,000 microns $\pm 10\%$ of reading
Resolution (increments)	microns: down to 1-micron Pascal: down to 1-Pa mbar: down to 0.01-mbar
Operating temperature	0° to +50 °C
Storage temperature	-10° to +60 °C
Maximum overpressure	150 psi (7.76 x 10 ⁶ microns)
Warranty	1 year

FEATURES AT A GLANCE

- unlike competing units, it starts measuring from the beginning of the evacuation cycle (i.e., full atmosphere)
- first and only HVAC/R vacuum gauge to use Pirani sensor technology for more precise readings
- competitively priced
- displays in microns, Pascal or millibars
- accurate readings from atmosphere (760,000 microns) down to one micron
- 1/4" stainless steel refrigeration fitting for easy access
- low-battery indicator and automatic shut-off after 15 minutes
- saves last reading with auto shut-off and displays it again at start-up
- nine-volt battery operation
- one-year, over-the-counter warranty
- can be used with any vacuum pump

PILOT / ACCESSORIES

Pilot Vacuum Gauge	710-202-G1
Carrying Case	710-600-G1
Vacuum Gauge Manifold	710-616-P1



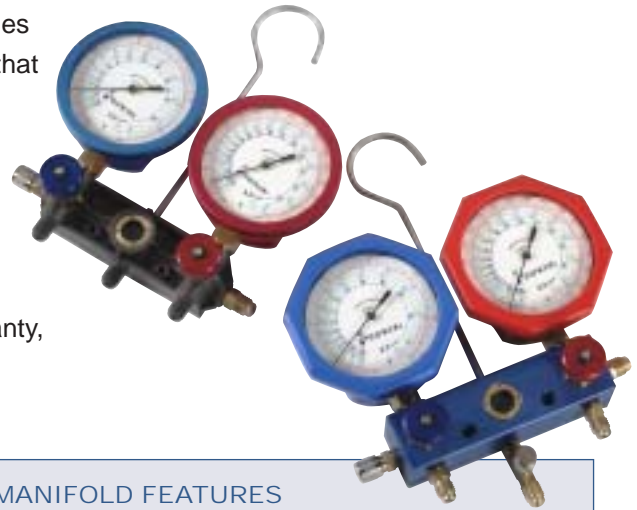
This one-valve manifold assembly offers a convenient way to mount the Pilot Vacuum Gauge and connect your vacuum pump to the system under evacuation. The center valve isolates all ports and seals vacuum tight.

Manifold Gauge Sets

Precise, Dependable Measurement.

The patented gauge movement in our manifold gauges delivers pulse/vibration free measuring and gauges that can withstand 2 ½ times over pressure without damaging the gauges. The large, easy-to-read gauge face is available in several configurations for your most demanding HVAC/R and automotive applications.

The manifold gauge sets come with a two year warranty, that's twice the warranty of any other manufacturer.



GAUGE FEATURES

- Pulse/vibration free measuring
- 1% accuracy
- Withstands 2 ½ times over pressure
- Large, 3", easy-to-read gauge face
- High and Low set gauges
- Hanging hook

MANIFOLD FEATURES

- Insertion valve for easier metering
- Large sightglass for visual contact of refrigerant flow
- Rebuildable valves, replacement seals available
- Durable metal knobs
- ¼" SAE connections

MANIFOLD GAUGE SETS

Temperature Scale Ranges

R12, R134a Automotive
R22, R134a, R404A
R410A
R12, R22, R502

Light Manifold Gauge Sets 2-way w/gauge protectors

710-602-G11A
710-602-G21
710-602-G31
710-602-G41

Light Manifold Gauge Sets 2-way w/out gauge protectors

710-602-G10A
710-602-G20
710-602-G30
710-602-G40

Temperature Scale Ranges

R12, R134a Automotive
R22, R134a, R404A
R410A
R12, R22, R502

Aluminum Manifold Gauge Sets 2-way w/gauge protectors

710-612-G11A
710-612-G21
710-612-G31
710-612-G41

Aluminum Manifold Gauge Sets 4-way w/gauge protectors

710-614-G11A
710-614-G21
710-614-G31
710-614-G41

Xtract-R™

Refrigerant Recovery Machine.



XTRACT-R REFRIGERANT RECOVERY MACHINE

Now there's a refrigerant recovery machine that's faster, lighter and won't be damaged by liquid slugs.

Xtract-R's specially designed, oil-less compressor and oversized fan speed collection of all refrigerants. A simple one-valve system extends compressor life and increases liquid tolerance.

Rugged and easy to carry in an attractive molded case, Xtract-R's self-purging capability eliminates changing hoses at the end of the recovery process.

More advanced equipment for the service professional from the D-TEK™ folks.

SPECIFICATIONS

Refrigerants	Designed to recover commonly used CFC, HCFC, or HFC including blends such as R404A and R410A
Weight	29 lbs
High-pressure shut-off	500 psi
Gauge ranges	Low pressure 30" Hg Vac - 500 psig High pressure 0-800 psig
Motor	1/3 H.P. DC
Warranty	1 year

XTRACT-R / ACCESSORIES

Xtract-R	EMRT-1	Base unit 115-volt operation, includes shoulder strap, 6 foot power cord, and user manual.
Accessory	QA21006	80% Tank overfill protection device.

CERTIFICATIONS

ARI Certified (Test method 740-95, Test report RRE-00011) to meet requirements of EPA 608; National Recycling and Emission Reduction Program for R12, R22, R134a, R407C, R500, and R502.

ARI Certified to meet refrigerant categories III, IV, and V as outlined by ARI Standard 740-98.

Representative Refrigerant	Category	Push-Pull Rate (lb/min)	Liquid Rate (lb/min)	Vapor Rate (lb/min)	High Temp Vapor Rate (lb/min)
R134a	III	8.38	1.90	0.22	N/A
R-22	IV	10.49	2.20	0.31	0.35
R410A	V	9.74	1.46	0.31	N/A



Call 1.800.344.3304 for your nearest distributor.



GLOBAL HEADQUARTERS

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