Respiratory Products

Invacare® Respiratory Products

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Since the early 1980s, Invacare has been providing high-quality, reliable and innovative respiratory products. From aerosol compressors to home oxygen systems, we've made it our mission to design products that cater to the needs of the ever-changing home health care industry. Solving problems. Finding solutions. You see, it's this dedication that keeps both clinicians and patients happy. And it's this very same dedication that has made us the market leader in oxygen concentrators.

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Connections and controls are designed for ease of operation by the patient.

Invacare® Venture® HomeFill™ II Oxygen Filling System

Model no. IOH200S (compressor and concentrator)

The Invacare Venture HomeFill II revolutionizes ambulatory oxygen by allowing patients to fill their own high-pressure cylinders from an Invacare 5 lpm concentrator. The Venture HomeFill II is a multi-stage pump that simply and safely compresses oxygen from a specially equipped Invacare 5-liter concentrator into oxygen cylinders in sizes M6, M9 (C), D and E.

The ability to fill their own cylinders gives ambulatory patients greater independence and freedom. Home care oxygen providers will benefit from the virtual elimination of time-consuming and costly service calls associated with cylinder and/or liquid oxygen deliveries.

The HomeFill II compressor is lightweight, weighing only 33 pounds.

FEATURES

- Small and lightweight
- Connections and controls are designed for ease of operation
- Fills cylinders while patient continues to receive oxygen from concentrator
- Virtually eliminates the high service costs of frequent deliveries of cylinders and/or liquid oxygen
- Gives ambulatory patients greater freedom and independence

Specifications

Electrical requirements	120 VAC ± 10% at 60 Hz
Power consumption	200 watts
Rated current input	2.0 amps
Inlet pressure rating	14 - 21 psi
Oxygen output (from concentrator)	0 - 3 lpm (while filling cylinders)
Oxygen input	0 -2 lpm
Dimensions	
Width	20.25"
Height	15"
Depth	16"
Weight	33 lb.
Cylinder filling times (avg.)	M6: 1 hr. 25 min., M9: 2 hr. 20 min., D: 4 hr., E: 6 hr.

Model Selection Guide

Model no.	Units/case	Warranty	Description
IOH200	1	1 year*	HomeFill II oxygen compressor
IOH200S	2	see IOH200 and IRC5LXH	HomeFill II compressor and 5-liter HomeFill II concentrator
IOH200S02	2	see IOH200 and IRC5LXO2H	HomeFill II compressor and 5-liter HomeFill II concentrator with SensO_2 monitor
IOH250	1	1 year	HomeFill II stand w/ bottle hanger
IOH2M6	1	6 years (regulator)	HomeFill cylinder assembly - M6 size
IOH2M9	1	6 years (regulator)	HomeFill cylinder assembly - M9 (C) size
IOH2MD	1	6 years (regulator)	HomeFill cylinder assembly - D size
IOH2ME	1	6 years (regulator)	HomeFill cylinder assembly - E size

* 3-year (or 5,000-hour) parts and labor warranty on internal-wear components and control-panel components.

Invacare® Polaris™ CPAP Device

Model no. ISP9800

The Invacare Polaris Continuous Positive Airway Pressure (CPAP) device makes life easier for both the patient and the clinician. Its innovative design and reliable performance provide almost effortless patient setup and monitoring. And its one-button operation, low noise level and patient-activated ramp increase patient compliance. In short, both you and your patients will sleep better with Polaris.

FEATURES

- Lightweight
- Ultra-quiet noise level
- Designed to provide years of trouble-free, reliable operation
- Easy to operate and set up for both patient and clinician
- Built-in tubing holder provides easy mask storage when device is not in use
- Washable, easy-to-change filter
- Illuminated digital pressure readout provides clear information
- Therapy delayed time feature (available in 5, 10, 20 and 30 minutes)
- Hour and compliance meters
- Pressure settings span the most common treatment range
- Provides stable and comfortable pressure, even through different elevations or during most leaks

Rear view of Polaris CPAP.

Shown with digital readout.

Shown with IQ gel cushion mask.

Specifications

Performance	
Operating pressure range	3-18 cm H_20 (in increments of 1 cm H_20)
Ramp	5, 10, 20 and 30 minutes
Dimensions	5.6" l x 8.9" w x 10.2" h (14.2 cm x 22.6 cm x 25.9 cm)
Weight	<5 lb. (2.27 kg)
Power supply	
Input range	110-240 volts, 50-60 Hz
Air filter	
Standard filter	45-60 ppi foam, reusable

Model Selection Guide

Model no.	Units/case	Warranty	Description
ISP9800	1	2 years	Polaris CPAP flow generator, air tubing
ISP9800K	1	2 years	Polaris CPAP kit: Polaris CPAP, flow generator, air tubing, med. mask, frame kit, med. headgear
ISP9800MKS	1	2 years	Polaris CPAP flow generator, air tubing, Sullivan® Mirage® mask standard size, carrying case
ISP9800MKL	1	2 years	Polaris CPAP flow generator, air tubing, Sullivan Mirage mask large size, carrying case
ISP9800IQ	1	1 year mask 2 years CPAP	Polaris CPAP flow generator, air tubing, IQ™ gel cushion mask, connector, large-strap headgear, carrying case
1089062	1	2 years	Polaris CPAP carrying case

Invacare® Polaris™ LT CPAP Device

Model no. ISP9900

The Invacare Polaris LT Continuous Positive Airway Pressure (CPAP) device is designed to offer your customers the high quality and maximum performance they demand at an affordable price. Its innovative design provides almost effortless patient setup. Couple this with one-button operation, low noise level and a patient-activated ramp, and it's no wonder the Polaris LT is making life easier for the patient, while keeping the price competitive for you, the provider.

FEATURES

- Economically priced
- Lightweight
- Ultra-quiet noise level
- Designed to provide years of trouble-free, reliable operation
- Easy to operate and set up for both patient and clinician
- Built-in tubing holder provides easy mask storage when device is not in use
- Washable, easy-to-change filter
- Features 20-minute therapy delay
- Pressure settings span the most common treatment range
- Provides stable and comfortable pressure

Shown with built-in tubing holder.

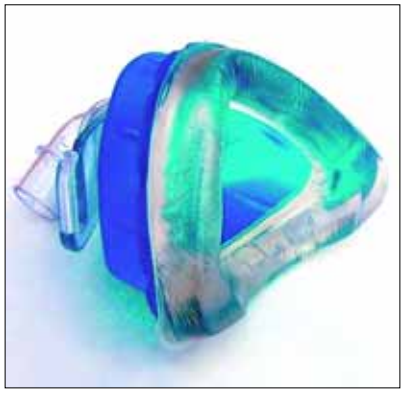
CPAP unit without lid.

Specifications

Performance	
Operating pressure range	3-18 cm H_20
Ramp	20 minutes
Dimensions	5.6" l x 8.9" w x 10.2" h (14.2 cm x 22.6 cm x 25.9 cm)
Weight	<5 lb. (2.27 kg)
Power supply	
Input range	110-240 volts, 50-60 Hz
Air filter	
Standard filter	45-60 ppi foam, reusable

Model Selection Guide

Model no.	Units/case	Warranty	Description
ISP9900	1	2 years	Polaris LT CPAP flow generator, air tubing, carrying case
ISP9900MKS	1	2 years	Polaris LT CPAP flow generator, air tubing, Sullivan® Mirage® mask standard size, carrying case
ISP9900MKL	1	2 years	Polaris LT CPAP flow generator, air tubing, Sullivan Mirage mask large size, carrying case
ISP9900IQ	1	1 year mask 2 years CPAP	Polaris LT CPAP flow generator, air tubing, IQ™ gel cushion mask, connector tubing, large-strap headgear, carrying case
1089062	1	1 year	Polaris CPAP carrying case
ISP9910	1	1 year	manometer kit (includes manometer, adapter and hose)



IQ™ gel mask cushion.

Invacare® Passport® Aerosol Compressor

Model no. IRC1190

The Invacare Passport is your gateway to high performance in aerosol therapy. Combined with the Invacare Sidestream® nebulizer, the Passport delivers medications properly sized for inhalation, quickly and effectively. And the contemporary styling of the Passport means the end of the medical look for home aerosol compressors.

FEATURES

- Contemporary, streamlined design for patient appeal
- Reusable inlet filter for easy maintenance and cost effectiveness
- UL and CSA listed
- Large storage compartment
- Hidden storage for electrical cord
- Short treatment times (7-9 minutes typical)*
- High percentage of particles below 5 microns (80% typical)*

*Using the MS2400 durable Sidestream nebulizer or MS2200 disposable Sidestream nebulizer.

Hidden storage for electrical cord.

Easily holds nebulizer and tubing. (Shown with MS2200 disposable Sidestream nebulizer.)

Specifications

Dimensions	
Width	10.5" (26.7 cm)
Height	4.2" (10.7 cm)
Depth	10.6" (26.9 cm)
Weight	5.5 lb. (2.5 kg)
Shipping weight	6.5 lb. (3.0 kg)
Running current	1.4 amps, 115 VAC
Thermal protector	UL 547 "Class B"
Operating pressure (typical)	14 psig, nominal
Operating flow rate (typical)	6 lpm, nominal

Model Selection Guide

Model no.	Units/Case	Warranty	Description
IRC1190	1	5 years	Passport aerosol compressor with disposable Sidestream nebulizer
IRC1196	1	5 years	Passport aerosol compressor** (Canada) with disposable Sidestream nebulizer

**CSA approved.

Invacare® Envoy™ Aerosol Compressor

Model no. IRC1192

The Invacare Envoy aerosol compressor provides an economical aerosol delivery system for managing the care of your respiratory patients. Small and lightweight, the Envoy is an ambassador of Invacare quality.

FEATURES

- Dual-function contoured handle holds nebulizer and allows for easy handling
- Reusable inlet filter for simple, cost-effective maintenance
- UL and CSA listed
- Large storage compartment holds nebulizer and supplies
- Hidden storage for electrical cord
- Short treatment times (7-9 minutes typical)*
- High percentage of particles below 5 microns (80% typical)*

*Using the MS2400 durable Sidestream nebulizer or MS2200 disposable Sidestream nebulizer.

Contoured handle holds a variety of nebulizers.

Specifications

Dimensions		
Width	11" (27.9 cm)	
Height	4.4" (11.2 cm)	
Depth	8.5" (21.6 cm)	
Weight	4.6 lb. (2.1 kg)	
Shipping weight	6.1 lb. (2.8 kg)	
Running current	115 volts 1.5 amps (approx.)	230 volts 0.6 amps (approx.)
Thermal protector	UL 547 "Class B"	
Operating pressure (typical)	10-12 psig (0.7-0.8 bars)	
Maximum compressor pressure	35-45 psig** (2.4-3.1 bars)	30-40 psig** (2.1-2.8 bars)
Operating flow rate (typical)	6 lpm	5 lpm

**Actual values depend on environmental conditions.

Convenient cord storage is separate from nebulizer supplies.

Model Selection Guide

Model no.	Units/Case	Warranty	Description	Plug	Voltage
IRC1192	1	5 years	Envoy aerosol compressor with disposable Sidestream nebulizer and two-wire polarized flat-blade plug		115 volts, 60 Hz
IRC1193	1	1 year	Envoy aerosol compressor with disposable Sidestream nebulizer and two-wire Europlug		220/230 volts, 50 Hz
IRC1194A	1	1 year	Envoy aerosol compressor with disposable Sidestream nebulizer and three-wire grounded Australian plug		220/230/240 volts, 50 Hz
IRC1194B	1	1 year	Envoy aerosol compressor with disposable Sidestream nebulizer and three-wire grounded UK plug		220/230 volts, 50 Hz
IRC1192D	1	5 years	Envoy aerosol compressor with durable Sidestream nebulizer		115 volts, 60 Hz

Invacare® Envoy™ Jr. Aerosol Compressor

Model no. IRC1001

Introducing a higher-quality, more economical compressor for aerosol treatment delivery–the Invacare Envoy Jr. This new compressor is not only efficient and cost-effective, but it's also simple to use. With this type of convenience, it's obvious the Envoy Jr. was designed with your patients in mind.

FEATURES

- Economically priced to meet the needs of the managed-care market
- Smaller footprint makes it easy to store
- Base cord wrap makes unit more compact for travel
- Aerodynamic shape and compact design make it easy to clean and store
- UL listed

Reusable inlet filter and recessed face for outlet protection.

Convenient cord wrap is built into base. Located on back of unit is the on/off switch.

Specifications

Height	7" (17.8 cm)
Weight	3.5 lb. (1.6 kg)
Shipping weight	4 lb. (1.8 kg)
Running current	115 volts 1.8 amps (approx.)
Thermal protector	UL 547 "Class B"
Operating pressure	11-15 psi (0.8-1.0 bars)*
Operating flow rate	5.5 - 6 lpm

*With Invacare VixOne nebulizer.

Model Selection Guide

Model no.	Units/Case	Warranty	Plug	Description
IRC1001	1	3 years limited		Envoy Jr. aerosol compressor with VixOne disposable nebulizer and two-wire polarized flat-blade plug

The Invacare disposable Sidestream®, the durable Sidestream and the Invacare VixOne (not pictured) are just some of the wide-ranging nebulizers Invacare has to offer.

Shown with MS2400 durable Sidestream nebulizer.

Invacare Freeway® Lite Portable Aerosol Compressor

Model no. IRC1195

The Invacare Freeway Lite is perfect for people on the go. Its small, portable compressor offers the freedom to nebulize typical medications whenever and wherever convenient. High-performance compressor technology matched to an Invacare durable Sidestream® nebulizer delivers medication more quickly and with a higher-quality aerosol.

FEATURES

- Short treatment times and high percentage of respirable particles when using the Sidestream nebulizer
- Three power options (AC, 12VDC or battery pack) for high versatility and portability
- Worldwide power pack can be used in foreign countries
- At full charge, rechargeable battery pack delivers approximately four treatments using Sidestream nebulizer
- Durable Sidestream nebulizer can be boiled for sterilization at home
- Convenient, soft-sided carrying case for easy portability

Specifications

Electrical requirements	90-240 VAC, 50-60 Hz or 12VDC
Running current	2A at 10 psig at 12 volts (approx.)
Ambient temperature range	10°C - 40°C (50°F - 104°F)
Power wattage	24 watts
Thermal protector	Internal solid state–auto resettable NOTE: The Freeway Lite unit and battery pack each have an internal resettable thermal fuse in case of overheating (operating longer than 20 minutes) or using an incorrect-polarity DC jack.
Safety systems	Class II double-insulated Type BF
Intake filter	300-micron polyethylene
Operating flow rate	6 lpm at 10 psig
Battery pack dimensions	4.7" l x 2.0" w x 2.1" h

	Compressor and main case	IRC1195 with all accessories
Width	6.6"	6.6"
Depth	6.1"	6.1"
Height	5.1"	7.5"
Weight*	4.1 lb.	5.6 lb.

* Includes 1.1-lb. removable battery.

Model Selection Guide

Model no.	Units/Case	Warranty	Description
IRC1195	1	1 year	Freeway Lite portable aerosol compressor with durable Sidestream nebulizer
MS2400	10	1 year	durable Sidestream nebulizer with mouthpiece and tubing

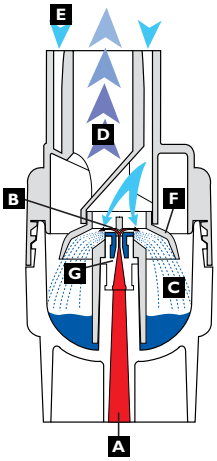
The battery pack can be easily removed and replaced. With proper maintenance, the battery can give as many as 2,000 treatments before replacement.

The carrying case has separate compartments to avoid contamination of medication supplies.

The Sidestream nebulizer reduces treatment time. A stand holds the nebulizer for filling or rest during treatment.

Freeway Lite Parts and Accessories

- **A** Freeway Lite portable aerosol compressor
- **B** Freeway Lite battery pack
- **C** Durable Sidestream nebulizer
- **D** Durable Sidestream mouthpiece
- **E** Coiled Duratube circuit tubing
- **F** AC power cord
- **G** AC/DC power pack
- **H** 12VDC lead
- **I** Detachable accessory bag



Cross-Section of Sidestream Nebulizer

- **A** Compressed air is supplied to the jet, which hits the baffle and is split into two high-velocity side streams
- **B** The liquid is drawn up the baffle under high-velocity air streams to form a film of liquid drug
- **C** Particles greater than 5 microns are returned to the reservoir for recirculation
- **D** Particles smaller than 5 microns continue on to the patient's lungs
- **E** The Venturi effect increases respirable output
- **F** Baffle
- **G** Jet

Invacare Sidestream® Nebulizers

Model nos. MS2200, MS2400

High-performance Invacare Sidestream nebulizers are a vast improvement over traditional small-volume nebulizers. The unique Venturi system in the Sidestream boosts the respirable output for faster drug delivery and low residual volume. Plus, particle size control has been maximized to give the highest percentage of particles below 5 microns. It's these innovations that allow the Sidestream nebulizer to deliver fast, clinically effective aerosol therapy.

FEATURES

- High respirable fractions–80% of drug particles below 5 microns when operated at 6 lpm (85% at 8 lpm)
- Venturi system boosts flow-through and drug output for shorter treatment times
- Low residual volume means less drug wasted
- Durable model lasts 12 months in normal usage
- Durable model can be boiled for sterilization

(Model Selection Guide on page 11)

FLOW RATE LPM	TOTAL FLOW (Venturi open) LPM	% O_2 CONCENTRATION*	OUTPUT (g/min)	% PARTICLES <5µm	RESPIRABLE OUTPUT (g/min)	TIME FOR DELIVERY OF 2.5ml (min)	MASS MEDIAN DIAMETER (µm)
6	16	50	0.37	80	0.3	6.7	3.0
8	22	50	0.46	85	0.39	5.4	2.75
6	6	100	0.250	50	0.125	10	5.0

Sidestream

Traditional Nebulizer

The respirable output of the Sidestream is increased by more than 140% compared to the traditional nebulizer.

*When operated from an O_2 driving source.

- The Venturi effect of the Sidestream boosts respirable output (RO) for faster drug delivery
- At 6 lpm delivery, the nebulizer output can reach up to 16 lpm, approximately 140% more RO than traditional nebulizers
- Venturi effect makes delivery of drugs less dependent on user technique, thereby minimizing residual volume for improved medication delivery

Left to right: MS2120, MS2110, MS2100

Invacare® VixOne Nebulizers

Model nos. MS2100, MS2110, MS2120

The Invacare VixOne nebulizer is the economical choice in small-volume nebulizers. Its ideal particle size production allows for high-volume lung deposition, which results in maximum therapeutic effect. Kit configurations include a standard mouthpiece kit, an adult mask kit and a pediatric mask kit.

FEATURES

- Anti-spill T-piece design
- Very low dead volume
- Nebulizes at angles up to 45°
- Graduated volume marking on medication chamber

Model Selection Guide

Model no.	Units/Case	Description
MS2400	10	durable Sidestream® nebulizer (10 ml capacity) with mouthpiece and 7 ft. (213 cm) tubing
MS2200	50	disposable Sidestream nebulizer (10 ml capacity) with mouthpiece and 7 ft. (213 cm) tubing
MS2120	50	VixOne nebulizer (5 ml capacity) with pediatric mask and 7 ft. (213 cm) tubing
MS2110	50	VixOne nebulizer (5 ml capacity) with adult mask and 7 ft. (213 cm) tubing
MS2100	50	VixOne nebulizer (5 ml capacity) with T-piece, mouthpiece, 7 ft. (213 cm) tubing and 6 in. (15 cm) flextube

Invacare AeroChamber® VHC

Model nos. HC80510, HC78510, HC88510, HC79510

The Invacare AeroChamber VHC (aerosol valved holding chamber) helps improve the delivery of medications from metered-dose inhaler (MDI) canisters. It also reduces the coordination required between canister activation and inhalation, making it easier for the patient to use the MDI correctly. And it reduces drug deposition to the mouth and throat, helping to eliminate unpleasant medication taste or hoarseness. AeroChamber VHC with ComfortSeal mask comes in two sizes, permitting MDI therapy to be administered to infants and small children.

FEATURES

- Clear chamber for easy visualization of proper activation of the MDI
- One-way valve to hold and protect the aerosol until inhalation begins
- Universal MDI adapter allows use with most MDIs
- FLOWSIGnal® alerts patient to excessive flow rates (adult versions only)
- ComfortSeal masks available in two sizes allow use by infants and small children
- Fifteen years of clinical research support AeroChamber use

Model Selection Guide

Model no.	Units/Case	Description
HC80510	10	AeroChamber VHC with adult mask
HC78510	10	AeroChamber VHC with medium ComfortSeal mask
HC88510	10	AeroChamber VHC with small ComfortSeal mask
HC79510	10	AeroChamber VHC with mouthpiece

Distribution limited to U.S. customers only.

Invacare TruPFM Zone® Peak Flow Meter

Model no. IRC1198

The Invacare TruPFM Zone peak flow meter makes it easy to monitor peak expiratory flow rates at home. The small size and shape enhance portability and ease of use. The unique logarithmic scale allows the TruPFM Zone to be used in low flow rate conditions (pediatrics) or for standard flow rates. And through the use of Color Zone® decals, each TruPFM Zone can be customized easily for color-zone management of asthma as recommended by the NAEPP (National Asthma Education and Prevention Program).

Application of the Color Zone decal by the health care provider customizes the TruPFM Zone for the patient. Visualization of the green, yellow and red zones makes it easy to follow the NAEPP guidelines for asthma management.

FEATURES

- Small size makes it easy to use or transport
- Clear body for easy reading of flow rate
- Internal indicator is protected from accidental mishandling
- Simple cleanup with soap and water
- Accurate measure of PEFR in low flows (pediatrics) and standard flows (adults)
- Color Zone decals easily customize the TruPFM Zone for color-zone management of asthma—no calculations required
- Meets the current American Thoracic Society® Waveform 26 standards

Specifications

Range	60-800 lpm
Dimensions	17.4 cm l x 3.2 cm w x 3.2 cm h
Weight	33.1 g

Model Selection Guide

Model no.	Units/Case	Warranty	Description
IRC1198	10	1 year	TruPFM Zone peak flow meter

Each TruPFM Zone is packaged with 4 Color Zone tapes and a daily record.

Distribution limited to U.S. customers only.

Invacare® Aspirators

Model nos. IRC1135 (shown above), IRC1136

Invacare aspirators are durable suction units designed for most home care suction requirements.

FEATURES

- High-performance vacuum specifications
- Adjustable vacuums from 0 to 22" Hg
- Durable piston vacuum pump
- Easy-to-read gauges
- Non-marring rubber feet
- Single-use collection jars and connecting tubing for quick and easy replacement (1 set included)
- UL and CSA listed

Specifications

Dimensions	13" l x 5.5" w x 10.25" h	
Weight	10.4 lb.	
Vacuum range	0-560 mm Hg 0-22" Hg	
Air flow	0-34 lpm	
Electrical requirements	115VAC 60 Hz, 1/10 hp shaded pole motor	220VAC 50 Hz, 1/10 hp shaded pole motor

Model Selection Guide

Model no.	Units/Case	Warranty	Description
IRC1135	1	1 year	aspirator, 115VAC/60 Hz
IRC1136	1	1 year	aspirator, 220VAC/50 Hz
IRC1140	10	n/a (disposable)	disposable collection jars, 800 cc capacity, 6 ft. suction tubing

Invacare® MOBILAIRE™ 50 PSI Compressor

Model no. IRC607

The durable Invacare MOBILAIRE 50 psi compressor is ideal for use with medications that require more flow and pressure to nebulize properly.

FEATURES

- Low-noise operation
- Easy-to-read pressure gauge
- Non-marring rubber feet
- Suction-cup feet for stable operation
- Durable piston
- Adjustable pressure
- UL and CSA listed

Specifications

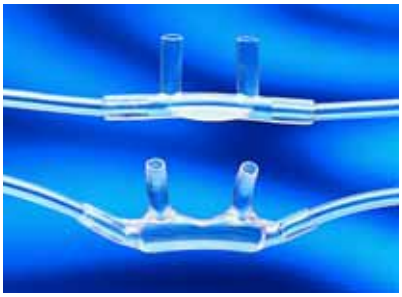
Dimensions	8" l x 8" w x 10.5" h
Weight	11.3 lb.
Pressure range	0-50 psi
Operating pressure	7 lpm at 23 psi nominal with a filtered nebulizer system
Electrical requirements	115 VAC/60 Hz, 1/8 hp shaded pole motor

Model Selection Guide

Model no.	Units/Case	Warranty	Description
IRC607	1	1 year	50 psi compressor, 115 VAC/60 Hz

Invacare offers you Total One Stop Shopping℠ with our line of disposable and reusable quality supplies for respiratory disease management. These oxygen therapy products include cannulas, masks, oxygen tubing and humidification products. Comfortable, durable and convenient, this Invacare product line is an essential aid in helping you to provide the best patient care possible.

Invacare® Nasal Cannulas



Top to bottom: MS3120, MS3110

Model Selection Guide

Model no.	Units/Case	Description
MS3120	50	nasal cannula, extra soft, curved tip, with 7 ft. (213 cm) crush-resistant tubing
MS3110	50	nasal cannula, curved tip, with 7 ft. (213 cm) crush-resistant tubing

Invacare® Medium-Concentration Masks

Left to right: MS3210, MS3211

Model Selection Guide

Model no.	Units/Case	Description
MS3210	50	elongated, medium-concentration oxygen mask, with 7 ft. (213 cm) tubing
MS3211	50	medium-concentration oxygen mask, pediatric, with 7 ft. (213 cm) tubing

Invacare® Tracheostomy Masks

Left to right: MS3250, MS3251

Model Selection Guide

Model no.	Units/Case	Description
MS3250	50	tracheostomy mask, adult
MS3251	50	tracheostomy mask, pediatric

Invacare® Oxygen Supply Tubing

Model Selection Guide

Model no.	Units/Case	Description
MS4107	50	7 ft. (213 cm) crush-resistant lumen oxygen tubing
MS4121	25	25 ft. (762 cm) crush-resistant lumen oxygen tubing
MS4150	15	50 ft. (1524 cm) crush-resistant lumen oxygen tubing
MS4301	50	oxygen tubing connectors (not shown)
MS4305	50	universal oxygen nut and nipple connector (not shown)

Invacare® Aerosol Tubing

Aerosol Tubing MS4200

Model Selection Guide

Model no.	Units/Case	Description
MS4200	2	50 ft. (1524 cm) roll corrugated aerosol tubing (22 mmID), cuffs every 6 inches (15 cm)

Invacare® Humidifiers/Nebulizers

Left to right: Humidifier 006-40, Humidifier 003-40, Large-Volume Nebulizer 037-28

Model Selection Guide

Model no.	Units/Case	Description
006-40	10	pre-filled humidifier with 650 ml sterile water and audible pressure-relief valve (5-10 psi)
003-40	20	pre-filled humidifier with 340 ml sterile water and audible pressure-relief valve (5-10 psi)
037-28	10	pre-filled, large-volume nebulizer, 760 ml sterile water; air entrainment ring allows selection of oxygen concentrations from 28% to 98%

Humidifier (unfilled) 3260

Model Selection Guide

Model no.	Units/Case	Description
3260	50	disposable unfilled humidifier with 500 ml capacity and audible 6 psi pressure-relief valve

The family of Invacare® oxygen concentrators is the right choice in oxygen concentrators. These highly reliable concentrators require little maintenance and are easy to service. More important, they consistently provide high concentrations of oxygen and protect your patients with an extensive alarm package.

Left to right: IRC5LX, IRC5LXO2, IRC6LXO2

Highly Reliable Electronics

An advanced electrical system makes this concentrator trouble-free.

- Concentrator conditions the incoming power, so it operates reliably in locations with adverse electrical conditions
- Transformer reduces shutdowns caused by electrical spikes, EMI and RFI
- Self-diagnostics feature LEDs and audible signals to speed trouble-shooting and maintenance
- Over-the-phone diagnostics distinguish patient-correctable situations from those requiring a service call

Ceramic 4-Way Valve

An innovative application of proven ceramic technology, it's the first valve of its kind in the industry. This valve is maintenance-free and extremely durable.

- Never needs cleaning
- Carries a lifetime warranty
- Runs smoothly due to powerful compressor-driven, dual-action shifting

Alarms and Safety Systems

The alarms are designed to notify patients, minimize service calls, protect components and extend the life of the concentrator.

- Battery-Free power-loss alarm eliminates the need for 9-volt batteries
- Sieve-GARD™ monitors sieve bed performance and shuts down the compressor to maintain sieve integrity in the event of a fault condition
- SensO_2® oxygen concentration monitor has two-stage alarm threshold
- Compressor features a 35 psi pressure-relief valve and a thermal cutoff switch

Pressure-Based System

Pressure-based software automatically adjusts valve cycle time to compensate for altitude, filter condition, line voltage and compressor maturity, ensuring consistently high oxygen concentrations.

- Four-way valve shifts based on pressure, not on time
- Valve shifts when pressure in sieve bed is optimal for delivering peak concentrations of oxygen

Maintenance and Service

A simplified maintenance schedule makes record keeping easier and lets providers determine when to perform maintenance.

- Filters are designed for maximum life, reducing service calls for filter changes
- Easy access to all components makes both maintenance and service quick and easy
- Quick-disconnect fittings on the wire harness make service easier
- Audible alarms help providers avoid unnecessary house calls
- LEDs diagnose fault conditions and help to speed repairs

Specifications

	Invacare® CareGuard™ 3	Invacare® 5	Invacare® 6
	Model no. IRC3LX	Model nos. IRC5LX, IRC5LXH, IRC5LXO2	Model nos. IRC6LXO2, IRC6LXO2T
Concentration levels*	95.6% to 87% at 1-3 lpm	95.6% to 87% at 1-5 lpm	95.6% to 87% at 1- 6 lpm
Flow (adjustable in ½-liter increments)	½ - 3 lpm	½ - 5 lpm	½ - 6 lpm
Electrical requirements (all models)	120 VAC+10%-15% (132 VAC/102 VAC), 60 Hz		
Power consumption	400 watts	400 watts	460 watts
Rated current input	3.6 amps	4.0 amps	4.0 amps
Maximum outlet pressure	5 psi ± 0.5 psi (34.5 kPa ± 3.45 kPa)	5 psi ± 0.5 psi (34.5 kPa ± 3.45 kPa)	5 psi ± 0.5 psi (34.5 kPa ± 3.45 kPa)
Sound level	52 dB average	53 dB average	53 dB average
Filters (all models)	cabinet, bacteria and compressor inlet		
Ambient temperature range	50°F - 95°F (10°- 35°C)	50°F - 95°F (10°- 35°C)	50°F - 95°F (10°- 35°C)
Safety system (all models)	current overload or line surge shutdown high-temperature alarm with compressor shutdown Sieve-GARD™ high-pressure alarm with compressor shutdown Sieve-GARD low-pressure alarm with compressor shutdown Battery-Free power-loss alarm pressure-relief valve		
Dimensions (all models)			
Width	18 in. (45.7 cm)		
Height	23.75 in. (60.3 cm)		
Depth	14 in. (35.6 cm)		
Weight	53 lb. (24 kg)	54 lb. (25 kg)	54 lb. (25 kg)
Shipping weight	58 lb. (26 kg)	59 lb. (27 kg)	59 lb. (27 kg)
Operational temperature (all models)			
Exhaust	maximum: ambient + 35° F (+ 19° C)		
Oxygen output	maximum: ambient + 4° F (+ 2° C)		
Cabinet (all models)	impact-resistant, flame-retardant plastic cabinet		
Regulatory listing (all models)	ETL-certified complying with UL 1431 CSA certified to C22.2 no. 1215-M1984 CE Mark, 220 volts only		

*Stated performance maximum achieved after 30 minutes of run time.

Model Selection Guide

Model no.	Units/Case	Warranty	Description	Peak flow
IRC3LX	1	3 years	Invacare CareGuard 3 oxygen concentrator	3 lpm
IRC5LX	1	5 years	Invacare 5 oxygen concentrator	5 lpm
IRC5LXH	1	5 years	Invacare 5 oxygen concentrator for HomeFill™ II	5 lpm
IRC5LXO2H	1	5 years	Invacare 5 oxygen concentrator with SensO$_2$ for HomeFill II	5 lpm
IRC5LXO2	1	5 years	Invacare 5 oxygen concentrator with SensO$_2$	5 lpm
IRC6LXO2	1	5 years	Invacare 6 oxygen concentrator with SensO$_2$	6 lpm
IRC6LXO2T	1	5 years	Invacare 6 oxygen concentrator with SensO$_2$ and Connect O$_2$™ telemetry system compatibility	6 lpm

Invacare oxygen concentrators are available in a wide variety of 220-volt export models.
Please contact your Invacare TBM or Account Services for details.

Detail of Invacare PreciseRx pediatric flowmeter

Invacare® PreciseRx™ Pediatric Flowmeter

Model no. IRCPF16

The Invacare PreciseRx pediatric flowmeter adapts Invacare oxygen concentrators for low-flow usage. This means you can now use the most efficient oxygen modality for pediatric applications.

FEATURES

- Delivers flow rates as low as 1/16 lpm or 50 cc/min. with or without humidifier bottles
- Delivers precise low-flow oxygen delivery: 1/16 - 3/4 lpm and 50-750 cc/min.
- Easy to install–no tools required
- Requires no permanent concentrator modification
- Prevents back pressure into concentrator
- Compatible with or without humidifier bottle

PreciseRx pediatric flowmeter and Invacare remote flowmeter

Invacare® Remote Flowmeter

Model no. IRCRF5

Not only does the Invacare remote flowmeter eliminate condensation in the supply tubing, it also enables the user to place the unit and humidifier up to 50 feet away from the Invacare concentrator.

FEATURES

- Delivers flow at rates between ½ and 5 lpm
- Helps to reduce condensation in tubing that causes service calls
- Works with or without humidifier bottle
- Allows user to adjust flow conveniently without changing the setting on the oxygen concentrator
- Comes with tubing and humidifier bottle

Model Selection Guide

Model no.	Units/Case	Warranty	Description
IRCRF5	1	1 year	remote flowmeter (flow range ½ - 5 lpm)
IRCPF16	1	1 year	PreciseRx pediatric flowmeter includes: flowmeter, tubing, connectors and humidifier bottle (flow range 1/16 - 3/4 lpm)
IRCPFS	1	1 year	pediatric flowmeter setup kit includes: all tubing and connectors necessary for additional user setups

Invacare PreciseRx pediatric flowmeter and remote flowmeter are designed for use exclusively with Invacare oxygen concentrators. The input pressure for both is 5 psi (34 kPa).

This single device checks oxygen concentration, flow rate and outlet pressure, eliminating the need for an additional device.

Invacare® Check O_2 Plus™ Concentrator Analyzer

Model no. IRC400

Now there's one economical instrument that reports all the operating parameters necessary for performing concentrator checks. Introducing the Invacare Check O_2 Plus, an efficient and cost-effective analyzer designed with technicians in mind. It checks oxygen concentration, flow rate and patient outlet pressure on any oxygen concentrator. What's more, it requires no routine calibration, and there's no fuel cell to replace. The Invacare Check O_2 Plus is three analyzers rolled into one.

FEATURES

- Requires no routine calibration
- Never needs to have the fuel cell replaced; it uses ultrasonic rather than galvanic fuel-cell technology
- Measures three parameters, eliminating the need for multiple instruments
- Features simple two-button operation
- Nine-volt battery power source provides three years of typical use
- Shuts off automatically to extend battery life

Specifications

Weight (with battery)	10 oz. (284 g)	
Operating temperature range	59°F - 95°F (+15°C - + 35°C)	
Parameter	Range	Accuracy
O_2%	73.0%-95.6%	± 2%
Flow	0-6 lpm	± 0.3 lpm (5% of full range)
Pressure	0-10 psi 0-68.95 kPa	± 1% ± 1%
Warranty	2 years limited	

A MM B M60 C M90 D ME E MD F M9(C) G M6

Invacare® Lightweight Aluminum Cylinders

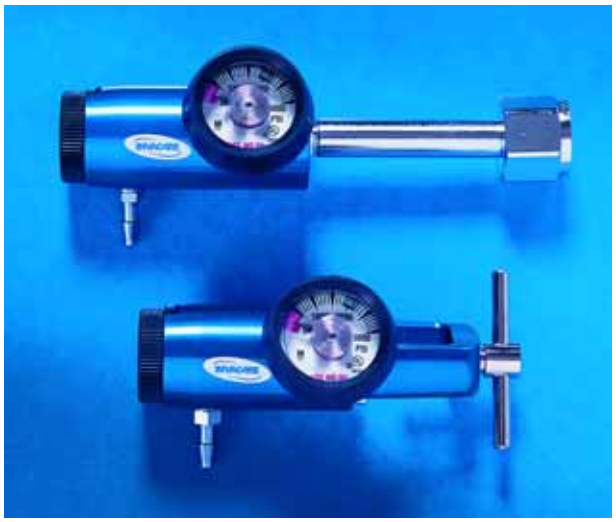
Invacare offers empty aluminum oxygen cylinders in standard sizes packaged to meet your requirements. You can order units in packs of six, or in competitively priced pallet quantities.

FEATURES

- All cylinders are available in both CGA870 standard and toggle valves (excluding the CGA540 configured sizes)
- Manufactured by Catalina Cylinders
- Competitively priced
- One-year warranty on post valves

Model Selection Guide

Cylinder size	Model no.	Units/Case	Oxygen capacity (liters)	Post valve	Valve type
M4	IRCM4870-6	6	115	CGA870	standard
M4	IRCM4870T-6	6	115	CGA870	toggle
M4	IRCM4870-144	144	115	CGA870	standard
M4	IRCM4870T-144	144	115	CGA870	toggle
M6	IRCM6870-6	6	164	CGA870	standard
M6	IRCM6870T-6	6	164	CGA870	toggle
M6	IRCM6870-144	144	164	CGA870	standard
M6	IRCM6870T-144	144	164	CGA870	toggle
ML6	IRCML6870-6	6	164	CGA870	standard
ML6	IRCML6870T-6	6	164	CGA870	toggle
ML6	IRCML6870-81	81	164	CGA870	standard
ML6	IRCML6870T-81	81	164	CGA870	toggle
M7	IRCM7870-81	81	198	CGA870	standard
M7	IRCM7870T-81	81	198	CGA870	toggle
M9	IRCM9870-6	6	248	CGA870	standard
M9	IRCM9870T-6	6	248	CGA870	toggle
M9	IRCM9870-81	81	248	CGA870	standard
M9	IRCM9870T-81	81	248	CGA870	toggle
MD	IRCMD870-6	6	415	CGA870	standard
MD	IRCMD870T-6	6	415	CGA870	toggle
MD	IRCMD870-81	81	415	CGA870	standard
MD	IRCMD870T-81	81	415	CGA870	toggle
ME	IRCME870-6	6	682	CGA870	standard
ME	IRCME870T-6	6	682	CGA870	toggle
ME	IRCME870-81	81	682	CGA870	standard
ME	IRCME870T-81	81	682	CGA870	toggle
M22	IRCM22870-72	72	647	CGA870	standard
M22	IRCM22870T-72	72	647	CGA870	toggle
M60	IRCM60540-42	42	1,726	CGA540	handwheel
M90	IRCM90540-42	42	2,549	CGA540	handwheel
MM	IRCMM540-25	25	3,452	CGA540	handwheel



Invacare® Piston Regulators

Invacare offers the right selection of regulator models, sizes and styles. Plus, the 6-year warranty ensures years of accurate, trouble-free service.

FEATURES

- "Select flow" style
- Lightweight and durable
- Bumper-protected contents gauge
- Flow lock knob
- Competitively priced

Model Selection Guide

Model no.	Units/Case	Warranty	Description	Maximum flow (lpm)
IRC2121	1	6 years	CGA870, 0-6 lpm	6
IRC2020	1	6 years	CGA870, 0-8 lpm	8
IRC2025	1	6 years	CGA870, 0-15 lpm	15
IRC2002	1	6 years	CGA870, 0-4 lpm (in pediatric increments)	4
IRC2030	1	6 years	CGA540, 0-15 lpm	15

Invacare® Compressed Oxygen Systems

Invacare compressed oxygen systems meet or exceed the requirements to support the home oxygen therapy patient and provider. They are applicable for virtually all home oxygen prescriptions. And because they contain fewer parts, Invacare systems minimize inventory space.

FEATURES

- Lightweight aluminum cylinder with or without contents gauge on valve
- Two-wheel cart or nylon shoulder bag
- Durable 0-8 lpm Invacare piston regulator to match cylinder
- Nasal cannula
- Plastic wrench
- Operating instructions
- Lightweight shoulder pack weighs just 8 lb.

Model Selection Guide

Model no.	Units/Case	Description
HP4111	1	D-size shoulder pack with contents gauge on cylinder valve
HP4121	1	D-size shoulder pack with contents gauge on cylinder regulator
HP4011	1	E-size cart system with contents gauge on cylinder valve
HP4021	1	E-size cart system with contents gauge on cylinder regulator
HP5102	1	nylon shoulder bag for D cylinder (blue)
HP5001	2	two-wheel cart for E cylinder
HP5900	1	plastic wrench for post valve

Now the convenience of hand-held pulse oximeters and capnometers is available from Invacare. These high-performance patient monitoring systems provide fast, accurate readings. They're lightweight, completely portable and engineered for durability. When you want respiratory monitoring in a home care setting, Invacare has the products that fit your needs.

A IRC700 B IRC725 C IRC750 D IRC775

Invacare® Pulse Oximeter

Model no. IRC700

The Invacare pulse oximeter provides fast, reliable SpO_2 and pulse-rate measurements on any patient from infant to adult. It's designed for simple, accurate spot-checking.

FEATURES

- Bright, easy-to-read LED numerals
- Storage for up to 99 patient SpO_2 and pulse readings
- Variety of reusable and disposable probes
- Three "C" cell batteries provide power for 1,500 spot-checks
- Quantitative pulse-strength bar depicts actual signal strength for a true indication of pulse strength and perfusion status
- Printer interface for documentation of live or stored patient data

Invacare® Printing Pulse Oximeter

Model no. IRC725

Ergonomically designed, the Invacare printing pulse oximeter is a low-cost, easy-to-use, hand-held pulse oximeter with an integrated printer. It provides fast, reliable spot-check information and documentation of SpO_2 and pulse rate. It is ideal for all patients from neonate to adult.

FEATURES

- Real-time or trend data printing for up to 99 patients
- Low cost
- Integrated printer for convenient documentation
- Storage for up to 99 patient SpO_2 and pulse readings
- Audible pulse tone
- Four "AA" batteries provide power for 1,500 spot-checks
- Auto-shutoff feature for extended battery life
- Easy-to-use 3-key operation

Invacare® Pulse Oximetry System

Model no. IRC750

The Invacare pulse oximetry system is a premium oximeter offering a full range of features. It operates in any of three clinical modes, allowing it to handle the widest array of clinical applications. Whether conducting spot-checks, continuous patient monitoring, or sleep screening, this oximeter can do it all. Its large memory can store up to 99 spot-checks or 24 hours of continuous monitoring. Data then can be downloaded to either a thermal printer or a personal computer for analysis and printing.

FEATURES

- Three clinical modes: spot-check, continuous and sleep
- User-selectable hi/lo alarm limits for SpO_2 and pulse rate
- Scroll-through function of patient data
- Printing capability via thermal printer or personal computer
- Rechargeable NiMH battery for 24 hours of use
- One-touch direct-function keys for easy no-menu operation

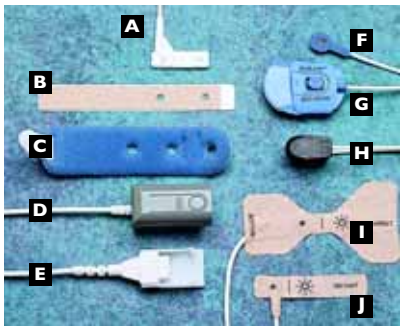
Invacare® Digital Pulse Oximeter

Model no. IRC775

The Invacare digital pulse oximeter monitors SpO_2, pulse rate and pulse strength. It is designed to provide fast, reliable measurements on challenging patients. The device rejects spontaneous motion and other artifacts, informs the operator of excess artifacts and improper sensor positioning, and processes low perfusion signals. Designed for spot-checking or bedside monitoring, this unit is ideal for use in home care and clinical environments, as well as during sleep screening.

FEATURES

- Digital technology allows stable readings during excess motion
- Three clinical modes: spot-check, continuous and sleep
- Full-featured alarms
- Compatible with sleep software
- Trend storage interval adjustable 4-30 seconds
- Adjustable averaging
- Pulse-strength bar graph
- Low-battery indicator
- Artifact indicator
- Versatile



- **A** Infant wrap probe
- **B** Attachment tape for infant wrap probe
- **C** Posey® wrap attachment for Universal "Y"
- **D** Durable finger probe
- **E** Oximetry cable
- **F** Universal "Y"
- **G** OxiLink® probe cover
- **H** Ear probe
- **I** Disposable probe, adult
- **J** Disposable probe, infant

Thermal printer with interface cables

Model Selection Guide

Model no.	Units/Case	Description
Invacare® pulse oximeter		
IRC700	1	Invacare pulse oximeter
IRC701	1	carrying case with belt clip and shoulder strap
IRC702	1	protective rubber boot with carrying strap
2002998	1	operation/service manual, IRC700
Invacare® printing pulse oximeter		
IRC725	1	Invacare printing pulse oximeter
IRC726	1	protective rubber boot, IRC725
1101132	1	operation manual, IRC725
1101133	1	service manual, IRC725
IRC729	4	printer paper, IRC725
Invacare® pulse oximetry system		
IRC750	1	Invacare pulse oximetry system
IRC751	1	carrying case with belt clip and shoulder strap
IRC752	1	protective rubber boot with carrying strap and tilt stand
2002999	1	clinician's operation manual, IRC750
2003000	1	service manual, IRC750
2003001	1	home-use instruction book, IRC750
IRC756	1	pole mount bracket
IRC840	1	AC charger, 115 volts
IRC770	1	oximetry cable, 5 ft.
Invacare® digital pulse oximeter		
IRC775	1	Invacare digital pulse oximeter
IRC780	1	protective rubber boot with carrying strap
IRC785	1	AC/DC adapter
1101826	1	operation manual, IRC775
1101827	1	home instruction manual, IRC775
1101828	1	service manual, IRC775
Probes		
IRC730	10	oximetry probe, disposable, adult finger
IRC731	10	oximetry probe, disposable, pediatric finger, 13-45 kg
IRC732	10	oximetry probe, disposable, infant, 3-15 kg
IRC740	1	oximetry probe, Universal "Y"
IRC741	10	OxiLink probe cover, small finger
IRC742	10	OxiLink probe cover, medium finger
IRC743	10	OxiLink probe cover, large finger
IRC799	1	durable finger probe
IRC900	1	infant wrap probe
IRC901	1	ear probe
IRC902	50	attachment tape for infant wrap probe
IRC903	10	Posey wrap attachment for Universal "Y"
Printers and cables		
IRC720	1	PC adapter cable, IRC700
IRC721	1	printer interface cable, IRC700
IRC722	1	thermal printer
1026572	5	replacement paper, thermal printer
IRC771	1	PC adapter cable, IRC750
IRC772	1	printer interface cable, IRC750
IRC773	1	PROFOX software (includes PC adapter cable) for analysis of sleep screening studies

Note: See page 24 for product specifications.

A IRC700 **B** IRC725 **C** IRC750 **D** IRC775

Patient Monitoring Systems Specifications

	Pulse oximeter (IRC700)	Printing pulse oximeter (IRC725)	Pulse oximetry system (IRC750)	Digital pulse oximeter (IRC775)
Displays, indicators & keys				
SpO_2	LED numeric display, 0.43" (10.9 mm) high	LED numeric display, 0.43" (10.9 mm) high	LED numeric display, 0.43" (10.9 mm) high	LED numeric display, 0.3" (7.62 mm) high
Pulse rate	LED numeric display, 0.375" (9.5 mm) high	LED numeric display, 0.375" (9.5 mm) high	LED numeric display, 0.375"(9.5 mm) high	LED numeric display, 0.3" (7.62 mm) high
Pulse strength	logarithmically scaled 8-segment bar graph	logarithmically scaled 8-segment bar graph	logarithmically scaled bar graph	logarithmically scaled 8-segment bar graph
Alarm silence	n/a	n/a	LED flashes or lights to remind user that audio alarms are disabled	LED flashes or lights to remind user that audio alarms are disabled
Low battery	left bar indicator lights when less than 2 hours remain	1 segment LED lights	LED flashes when approximately 1 hour of battery life remains	LED flashes when approximately 30 minutes of battery life remains
Probe	if unit is not connected, system shuts off in 2 minutes	if unit is not connected, system shuts off in 2 minutes	LED flashes to alert operator to check SpO_2 probe placement	LED flashes to alert operator to check SpO_2 probe placement
SpO_2				
Range	0-99%	0-99%	0-100%	0-99%
Accuracy	± 2% at 70%-100%; ± 3% at 50%-69%	± 2% at 70%-90%	± 2% at 70%-100%; ± 3% at 50%-69%	± 2% at 70%-99%; ± 3% at 50%-69%
Averaging	8 pulse beat average	8 pulse beat average	4, 8 or 16 pulse beat average	4, 8 or 16 pulse beat average
Alarm range	n/a	n/a	high – 50%-100% and OFF (1% steps) low – OFF and 50%-99% (1% steps)	high – 50%-99% and OFF (1% steps) low – OFF and 50%-98% (1% steps)
Pulse rate				
Range	30-254 bpm	30-254 bpm	30-254 bpm	30-254 bpm
Accuracy	± 2%	± 2%	± 2%	± 2%
Averaging	8-second average	8-second average	8- or 16-second average	8- or 16-second average
Alarm range	n/a	n/a	high – 5-250 bpm and OFF (5 bpm steps) low – OFF and 5-250 bpm (5 bpm steps)	high – 5-254 bpm and OFF (1 bpm steps) low – OFF and 5-254 bpm (1 bpm steps)
Memory	99 spot-checks	99 spot-checks	99 spot-checks or 24 hours of continuous data	99 patients or 102 hours of run time
Dimensions	6.30" h x 3.25" w x 1.25" d 16.0 cm x 8.3 cm x 3.2 cm	6.60" h x 2.75" w x 1.43" d 16.8 cm x 7.0 cm x 3.6 cm	7.25" h x 3.30" w x 1.85" d 18.4 cm x 8.4 cm x 4.7 cm	6.60" h x 2.75" w x 1.43" d 16.8 cm x 7.0 cm x 3.6 cm
Weight	16.5 oz. (0.5 kg) with batteries	13 oz. (0.4 kg) with batteries	20 oz. (0.6 kg) with batteries	16 oz. (0.5 kg) with batteries
Auxiliary serial printer/computer output				
	SpO_2 and pulse-rate values output every 5 seconds to optional printer	SpO_2 and pulse-rate values output every 5 seconds	SpO_2 and pulse-rate values output every 5 seconds to optional printer; spot-check and graphic trends of stored data	SpO_2, pulse-rate and pulse-strength values output every 5 seconds to optional printer; spot-check and graphic trends of stored data
Power requirements				
Power source	3 "C" cell alkaline or NiCad batteries	4 "AA" cell alkaline batteries	NiMH rechargeable battery	6 "AA" cell alkaline batteries
Battery life	approximately 1,500 spot-checks (1 minute on, 2 minutes off)	14 hours with continuous printing 24 hours with no printing	24 hours of continuous use; 6-hour recharge time	24 hours of continuous use
Safety approvals	UL 544 listed certified by TUV to IEC-601-1; CSA 125	UL 544 listed certified by TUV to IEC-601-1; CSA 125	UL 544 listed certified by TUV to IEC-601-1; CSA 125	UL 544 listed certified by TUV to IEC-601-1; CSA 125
Limited warranty	2 years	2 years	2 years	2 years

Capnometer – IRC800

Invacare® Capnometer

Model no. IRC800

The Invacare capnometer provides End Tidal CO_2 ($ETCO_2$) measurements with this easy-to-use hand-held instrument. It reports $ETCO_2$ and respiratory rate on virtually any patient from neonate to adult, intubated and non-intubated alike. Data storage and printing capabilities simplify documentation, and infrequent calibration makes it convenient for home use.

FEATURES

- Storage for up to 99 spot-checks or 24 hours of continuous data
- Printing capability via thermal printer or personal computer
- Reliable Sidestream® technology for use on intubated and non-intubated patients
- One-touch direct-function keys for easy no-menu operation
- Easy-to-read LED displays for $ETCO_2$ and respiratory rate
- Quantitative breath indicator bar
- Ergonomic design for lightweight, hand-held spot-check use
- Lightweight (20 oz.) design
- Infrequent calibration: every 4 to 6 weeks

Model Selection Guide

Model no.	Units/Case	Description
IRC800	1	Invacare capnometer
IRC801	1	protective rubber boot with carrying strap
IRC802	1	carrying case with belt clip and shoulder strap
2003002	1	operation manual, IRC800
2003003	1	service manual, IRC800
IRC810	1	calibration kit
IRC811	1	gas refill for calibration kit
IRC812	1	replacement regulator for calibration kit
IRC820	10	straight airway adapter 15.1 d x 15.0 d (mm)
IRC821	10	sample line, 4 ft.
IRC822	10	gas manifold filters
IRC830	10	nasal CO_2 sample line, adult
IRC831	10	nasal CO_2 sample line, pediatric
IRC832	10	nasal CO_2 sample line, infant
IRC840	1	AC charger, 115 volts
IRC841	1	printer interface cable, 1 ft.

Specifications

$ETCO_2$	
Range	0-100 mm Hg or 0-13.3 kPa or 0-10% CO_2 (units are factory-set)
Accuracy	±4% of reading or ±2 mm Hg, whichever is greater
Response time	375 msec to 90% of value
Averaging	4-breath average (updated with every breath)
Display	3 digits of 0.5" alphanumeric, 7-segment LEDs
Respiration rate	
Range	0-100 bpm
Accuracy	±2 bpm
Averaging	4-breath average (updated with every breath)
Display	3 digits of 0.3" alphanumeric, 7-segment LEDs
Breath indicator	
Display	16-segment, LED bar graph
Resolution	5 mm Hg or 0.5 kPa or 0.5% CO_2 (units are factory-set)
Flow rate	140 ml/min. ±20
Memory	99 spot-checks or 24 hours of continuous data
Dimensions	7.9" h x 3.3" w x 1.6" d 20.1 cm x 8.4 cm x 4.1 cm
Weights	20 oz. (0.6 kg)
Safety approvals	listed by TUV to IEC-601-1 listed by CSA to CSA C22.2 no. 125; UL 544
Power requirements	
Battery	NiMH; 24 hours of continuous use; 6-hour recharge time
AC charger	105-125V – 50/60 Hz (USA)
Printer output	
I/O port	serial RS-232C
I/O connector	phone jack to standard DB-9
Data	ASCII
Data format	9600 baud, 1 start bit, 8 data bits, 1 stop bit, no parity
Mechanical durability test results	
Vibration testing	in compliance with IEC 68-2-27
Shock testing	meets IEC 68-2-27 standards
Drop testing	exceeds UL 544 testing recommendations
Limited warranty	2 years

HELiOS® Liquid Oxygen System

Model nos. B-701653-00 36-liter reservoir, B701652-00 46-liter reservoir, B-701604-00 portable

Long-term oxygen users can return to a more active lifestyle with the HELiOS oxygen system, an innovative new product that frees patients from the encumbrance of heavy equipment and the need for frequent refilling. Weighing only 3.4 pounds when filled, the portable unit is so small that it's almost unnoticeable, but it offers usage duration of approximately 8-10 hours at a flow setting of 2 lpm. The large capacity and efficient setup of the HELiOS reservoir reduce oxygen deliveries to as few as ten per year, and the portable unit takes only 40 seconds to fill from the reservoir. Operating in a variety of positions for a variety of activities, HELiOS gives long-term patients the freedom to do just about anything, all day long.

HELiOS RESERVOIR OXYGEN SYSTEM FEATURES

- Proprietary high-capacity, no-loss system reduces oxygen deliveries to as few as 10 per year
- 10 lpm continuous flow capability with accessory flow controller
- LED content indicator
- Built-in head pressure gauge
- Recessed moisture container
- Portable release "slam" button

HELiOS PORTABLE OXYGEN SYSTEM FEATURES

- Small and lightweight; weighs only 3.4 lb. filled
- Provides maximum freedom, comfort and independence
- Usage duration of approximately 8-10 hours at 2 lpm
- Fills easily in about 40 seconds
- Built-in pneumatic conserver requires no batteries
- Built-in spring scale for easy monitoring of oxygen contents
- Operates in various positions for safety and convenience

Specifications

	36-liter reservoir	46-liter reservoir	Portable
Capacity			
LOX	85 lb.	110 lb.	0.9 lb.
Gaseous equivalent	29,069 liters	37,619 liters	308 liters
Dimensions			
Weight, filled	135 lb.	170 lb.	3.4 lb.
Weight, empty	50 lb.	60 lb.	2.5 lb.
Height including handle	33.5"	37.5"	10.5"
Diameter	15.4"	15.4"	n/a
Operating pressure	22 psig	22 psig	22 psig
Normal evaporating rate			
Typical	1.2 lb./day	1.2 lb./day	1.0 lb./day
Maximum	1.5 lb./day	1.5 lb./day	1.5 lb./day
Typical use at setting of 2 lpm continuous flow	242 hours	313 hours	n/a
24 hours/day demand flow (at 16 bpm)	35 days	46 days	10 hours
Warranty	1 year*	1 year*	1 year*

* 5 years on vacuum.

OxiClip® PC 20 Personal Oxygen Conserver

Model no. B-701420-00

The OxiClip PC 20 is a highly effective conserver for stationary liquid-oxygen systems and high-pressure cylinders. Small and portable, this pneumatically powered conserver can be worn by the patient, permitting a travel range of more than 100 feet from the oxygen source, with no decrease in sensitivity, trigger time or delivery speed. The OxiClip is compatible with any 20 psig oxygen source having a flow of 6 lpm or greater. Its delivery volume automatically adjusts to changes in inspiratory time, with demand flow initiated by the patient.

FEATURES

- Pneumatic design requires no computer boards or batteries
- Can be worn more than 100 feet from oxygen source
- Small and portable; weighs only 5 oz.
- Compatible with any 20 psig oxygen source with flow of 6 lpm or more
- Automatically adjusts delivery volume as inspiratory time changes
- No alarms needed
- Demand flow is initiated by the patient
- Provides minute volume equal to or greater than continuous flow

Specifications

Delivers on every breath	12 ml bolus followed by continuous flow throughout inspiration
Delivery flow range	0.25 to 6 lpm when sourced with 6 lpm or more at 20 psig pressure
Continuous flow settings	0 to 0.75 lpm
Conserving flow settings	1 to 6 lpm
Flow settings	off, 0.25, 0.5, 0.75, 1, 1.5, 2, 2.5, 3, 4, 5, 6 lpm
Inlet pressure	flows calibrated at 22 psig
Weight	5 oz.
Warranty	1 year

CR 50 Conserving Oxygen Regulator

Model no. 6-134220-01

Invacare is pleased to offer the CR 50, the first truly compact oxygen regulator and conserving system in one. The pneumatically powered CR 50 delivers flow at the set rate throughout inspiration, regardless of inhalation length, with minute volume that equals or exceeds continuous flow. And it's simple to set, using one easy-to-understand control.

FEATURES

- Regulator and conserving system combined in one unit
- Pneumatic design requires no computer boards or batteries
- Installs onto cylinder just like a regulator
- Dual-lumen cannula provides nominal savings of 50% from 1 to 6 lpm
- Delivers flow at set rate throughout inspiration, regardless of inhalation length
- Provides minute volume equal to or greater than continuous flow
- Simple to set with just one easy-to-use control

Specifications

Delivers on every breath	12 ml bolus followed by continuous flow throughout inspiration
Delivery flow range	0.25 to 6 lpm when sourced with 6 lpm or more at 20 psig pressure
Continuous flow settings	0 to 0.75 lpm
Conserving flow settings	1 to 6 lpm
Flow settings	off, 0.25, 0.5, 0.75, 1, 1.5, 2, 2.5, 3, 4, 5, 6 lpm
Nominal regulating pressure	22 psig
Pressure-relief valve settings	50 psig
Weight	1.1 lb.
Warranty	1 year

Invacare® Oxygen Conserving Devices

Invacare® Venture® Demand Oxygen Delivery Device

Model no. IDD20EX

Invacare's recently enhanced Venture Demand Oxygen Delivery Device (DODD) is designed to give patients the freedom to do more of what they want to do. When used with smaller cylinders, it is lightweight, portable and extremely easy to carry. Extended oxygen usage time makes it perfect for out-of-home use.

Through a wide range of respiratory rates (10-40 bpm), the Venture DODD is able to deliver precise amounts of oxygen at the very beginning of each breath in which delivery duration is dependent on respiratory rate (variable-pulse technology). And its alarms are clearly identified, making solutions simple and quick.

Venture pack systems are available for carrying an M6 cylinder (IDD211EX) or an M9 (C) cylinder (IDD212EX).

FEATURES

- Increases duration of cylinder use by up to 6 times
- Variable demand will provide up to 4:1 conservation ratio
- Internal clinicians' switch will provide up to 6:1 conservation ratio
- Simple operation using only 2 buttons (on & off)
- Switches easily from continuous to pulse modes; no disconnection required
- Adapts to compressed gas or liquid oxygen
- Uses one D-size disposable battery
- Includes small and lightweight Venture pack systems for easy carrying
- Provides easy-to-use regulator for setting flow
- Features easy-to-understand "Disconnect," "No Gas" and "Low Battery" alarms

The Venture DODD can also be used on liquid-oxygen reservoirs.

Specifications

Battery usage time	approx. 80 hours at 20 bpm	
Flow rate range	0-6 lpm	
Oxygen source pressure	20 psig (± 3 psi)	
Regulator	Flow settings 0-6 lpm	Regulated pressure 20 psig
Length	5.4"	
Thickness	1.6"	
Width	3.6"	
Weight	16 oz.	

Venture accessories

Model Selection Guide

Model no.	Warranty	Description
IDD20EX	3 years	Venture 20 psi DODD with connecting tube
IDD211EX	3 years	Venture 20 psi DODD, green shoulder bag, M6 cylinder, 20 psi regulator and tubing (5.8 lb.)
IDD212EX	3 years	Venture 20 psi DODD, green shoulder bag, M9 (C) cylinder, 20 psi regulator and tubing (8.8 lb.)
IRC2121	6 years	20 psi piston regulator, 0-6 lpm
2002919	1 year	Venture pouch (attaches on cylinders)
1093320	1 year	green shoulder bag, universal (M6/M9)

Yes, you can.™

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