



oxygen therapy



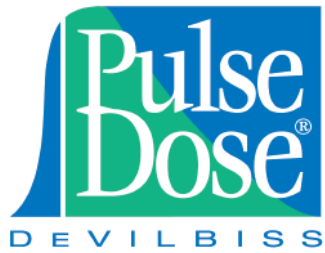
DEVILBISS®



**SUNRISE
MEDICAL**
www.sunrisemedical.com

Improving People's Lives

Oxygen Conserving Devices



PulseDose Technology

For more than 15 years, DeVilbiss PulseDose oxygen conserving technology has been on the leading edge of ambulatory oxygen therapy. Unlike other systems that simply limit the flow of oxygen, PulseDose delivers a consistent dose of oxygen at the very moment it is most beneficial – on the leading edge of inspiration.

PulseDose actually delivers oxygen more efficiently than continuous flow with consistent high flow delivery right when the patient needs it most.

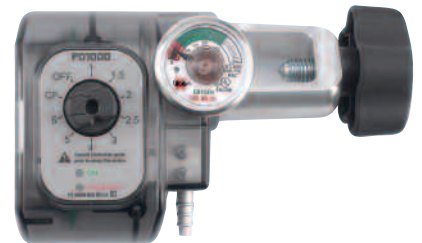
For active patients, adjustment of the setting is not needed, simplifying operation and minimizing the chance of desaturation.

Since oxygen waste is minimized, patients will be able to extend cylinder life dramatically, supporting the benefits of a more active lifestyle.

Patients often report an improved sense of taste and smell, and decreased drying of the nasal passages with PulseDose systems. As comfort and confidence increase, patients are more likely to wear their oxygen constantly, resulting in better compliance with their prescribed therapy.

PD1000 PulseDose LT Compact

- 3.5:1 Real Savings Ratio*
- 3-year warranty
- Field-serviceable: speeds return of unit to use
- Easy to set-up, use and maintain
- Compact size
- Very light weight (16.3 oz.)



PD4000 PulseDose Extended

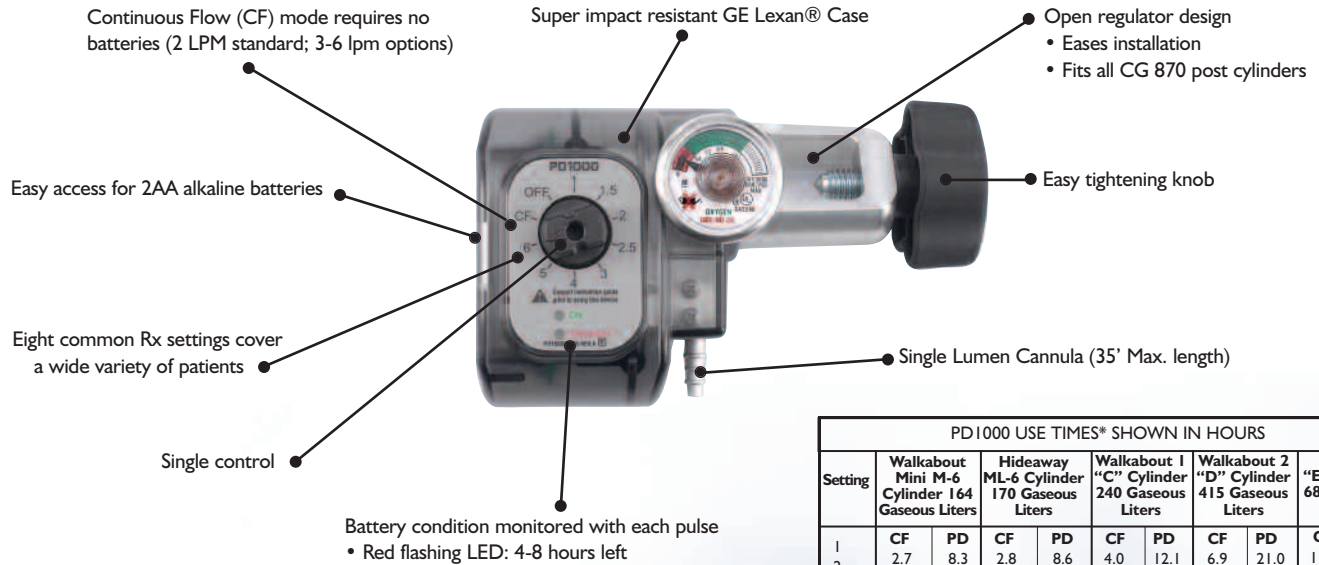
- 4:1 Real Savings Ratio*
- 3-year warranty
- Audible alarms sound (low O₂ and no breath taken)
- Field-serviceable: speeds return of unit to use
- Easy to set-up, use and maintain
- Adjustable continuous flow setting does not require batteries
- Protected contents gauge



* based on testing from Valley Inspired Products, Burnsville, MN

Conserving Device Features

PD1000



Continuous Flow (CF) mode requires no batteries (2 LPM standard; 3-6 lpm options)

Super impact resistant GE Lexan® Case

Open regulator design

- Eases installation
- Fits all CG 870 post cylinders

Easy access for 2AA alkaline batteries

Easy tightening knob

Eight common Rx settings cover a wide variety of patients

Single Lumen Cannula (35' Max. length)

Single control

Battery condition monitored with each pulse

- Red flashing LED: 4-8 hours left

PD1000 USE TIMES* SHOWN IN HOURS										
Setting	Walkabout Mini M-6 Cylinder 164 Gaseous Liters		Hideaway ML-6 Cylinder 170 Gaseous Liters		Walkabout 1 "C" Cylinder 240 Gaseous Liters		Walkabout 2 "D" Cylinder 415 Gaseous Liters		"E" Cylinder 682 Gaseous Liters	
	CF	PD	CF	PD	CF	PD	CF	PD	CF	PD
1	2.7	8.3	2.8	8.6	4.0	12.1	6.9	21.0	11.4	34.4
2	1.4	4.1	1.4	4.3	2.0	6.1	3.5	10.5	5.7	17.2
3	.9	2.8	.9	2.9	1.3	4.0	2.3	7.0	3.8	11.5
4	.7	2.1	.7	2.1	1.0	3.0	1.7	5.2	2.8	8.6
5	.6	1.7	.6	1.7	.8	2.4	1.4	4.2	2.3	6.9
6	.4	1.4	.5	1.4	.7	2.0	1.2	3.5	1.9	5.8

CF=Continuous Flow PD=PulseDose LPM=Liters Per Minute

PD4000



Easy tightening knob

Single C cell battery easy to access and change

Protected contents gauge minimizes chances of damage

Eleven common Rx settings cover a wide variety of patients

Balanced, round design reduces tipping

Simple, easy to turn dial

Super impact resistant GE Lexan® and Cylolac® Case

Yellow LED indicates 4-8 hrs. left

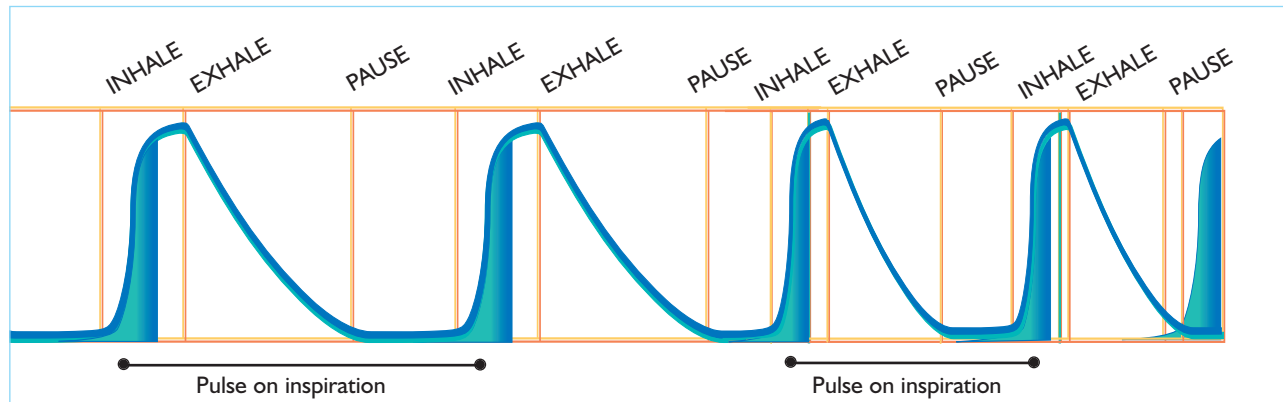
Single Lumen Cannula (35' Max. length)

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	CF	PD	CF	PD	CF	PD	CF	PD	CF	PD
1	2.7	9.6	2.8	10.0	4.0	14.3	6.9	24.6	11.4	40.7
2	1.4	5.0	1.4	5.0	2.0	7.1	3.5	12.5	5.7	20.3
3	.9	3.2	.9	3.4	1.3	4.6	2.3	8.2	3.8	13.6
4	.7	2.5	.7	2.5	1.0	3.6	1.7	6.1	2.8	10.0
5	.6	2.0	.6	2.1	.8	2.9	1.4	5.0	2.3	8.2
6	.4	1.6	.5	1.6	.7	2.4	1.2	4.3	1.9	6.8

CF=Continuous Flow PD=PulseDose LPM=Liters Per Minute

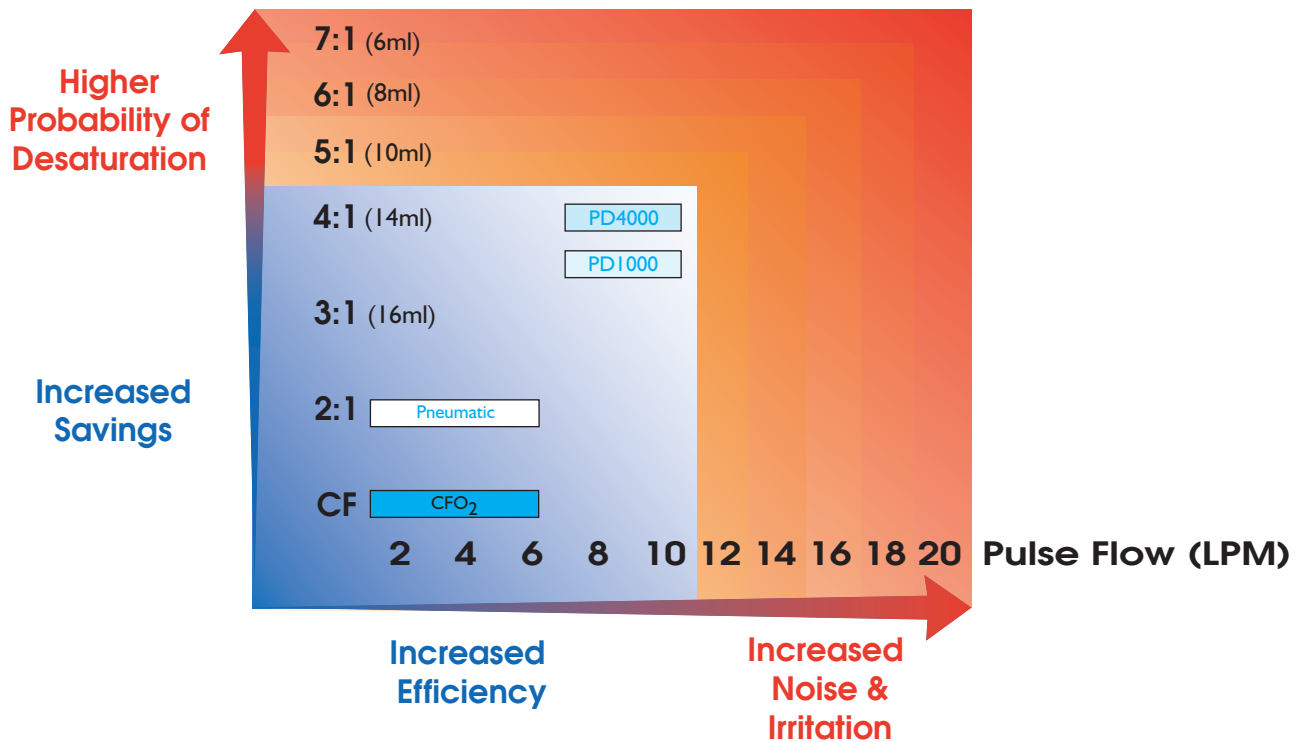
* Based on 20 breaths per minute

Why PulseDose?



- PulseDose delivers a bolus of oxygen through the nasal cannula at the leading edge of inspiration.
- This process is repeated on every breath, up to 40 breaths per minute.
- PulseDose responds to increases in breath rate, delivering more oxygen when needed.
- RESULT: Minimizes need to reset unit during exertion, reducing chances of desaturation while supporting an active lifestyle.

Effective Savings



- PulseDose delivers oxygen at 10 lpm therefore oxygen is delivered deep into lungs
- Additionally, PulseDose delivers 16.5ml* (PD1000) or 14.0 ml* (PD4000) per liter setting for optimal savings
- Patients are less likely to desaturate at any breathing rate

*NOTE: ml O₂/setting at 20 bpm



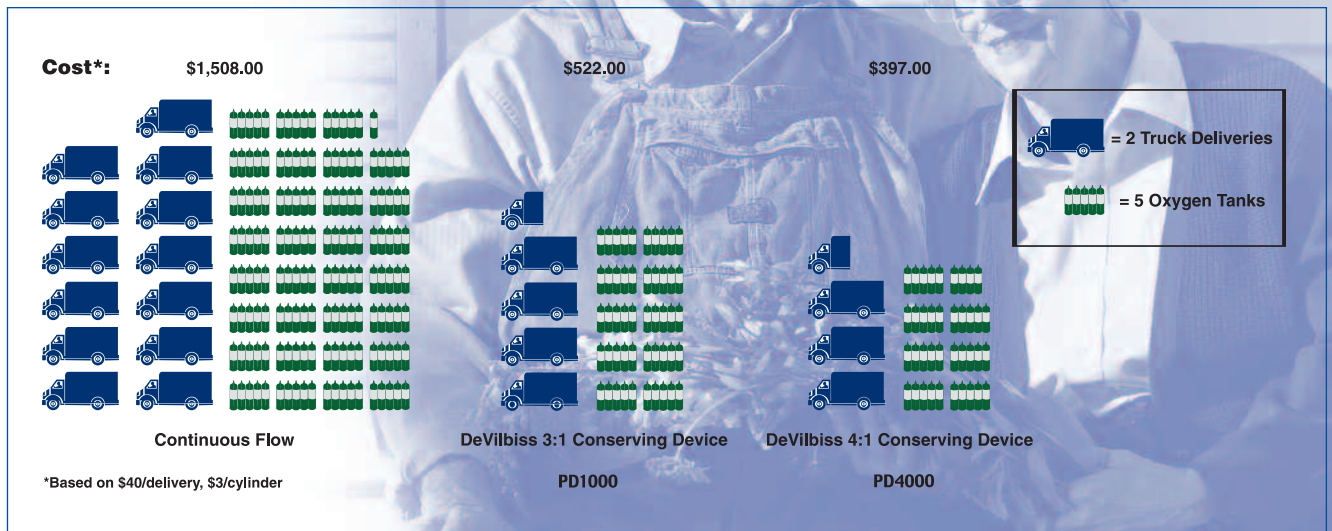
Improved Clinical Benefits & Compliance



- Patients are more likely to tolerate using PulseDose
 - Patients report an improved sense of taste and smell
 - Patients report decreased drying of the nasal passages
 - Easy-to-use and maintain
 - Provides longer ambulation on a small O₂ cylinder
- As comfort and confidence increase, patients are more likely to comply with their prescribed oxygen therapy which can lead to improved long-term compliance and clinical benefit

Cost Savings

Representation of a continuous flow patient who receives 6 cylinders every 2 weeks



- PulseDose oxygen conserving devices can make your oxygen business more profitable by reducing the number of deliveries you make and cylinders you fill for each ambulatory oxygen patient.
- A PulseDose conserving device can pay for itself within 3-4 months of use.

Safety Features

Not only do DeVilbiss oxygen concentrators lead the industry in reliability and durability, they provide unmatched patient safety. Safety features found on all DeVilbiss oxygen concentrators include:

- Pressure-compensated flow meter that displays accurate flow to the patient
- Pressure-relief valve and thermal protection on the compressor
- Double-insulated unit; two-prong plug
- Flame-retardant cabinet
- High/low pressure alarms
- Power failure alarm

Three-Liter Concentrator 303DS/DZ

- Lightweight, compact and portable
- Easy to transport
- Light enough so that patients can take it with them while traveling - 37 pounds
- Proven reliability and efficiency
- Pressure-vacuum system—unique to DeVilbiss
- Dual-head compressor: One head is used to produce pressure, the other head is used to produce a vacuum
- Single-solenoid valve with a 10-year warranty
- $93\% \pm 3\%$ oxygen concentration at all liter flows
- Extended life intake bacteria filter
- Reduced wattage—only 270 watts



Five-Liter Concentrator 515ADS/ADZ

515ADS/ADZ

- Exclusive Rotary Valve System contributes to the improved performance of the 515A
 - Designed for greater flow through the valve and process flexibility
 - Life testing shows exceptional reliability for 10 million cycles, representing over 5 years of average use (at 5,000 hours/year)
- Improved Reliability – Five year bumper-to-bumper warranty is standard
- Lighter, 50 pounds – the reduction of two pounds means easier transport and handling
- Quieter – the 3 dBa reduction means most people should notice a clear improvement in noise level. 48 dBa (515ADZ measured per ISO 3744)
- Cooler Running – 10% - 15% cooler around the compressor, due to improved air flow, means longer compressor life
- Fixed humidifier port, recessed humidifier pocket helps prevent bottle and connection breakage
- Pressure-compensated flow meter permits use of long cannula while maintaining accurate flow setting
- Low-cost routine maintenance
 - Intake filter: 8760 hours
 - All parts mounted to be replaced in minutes

515ADS (with oxygen sensor)

Below 2 1/2 LPM flow, the system automatically “turns down” its flow cycle, resulting in (as compared to the 515DS):

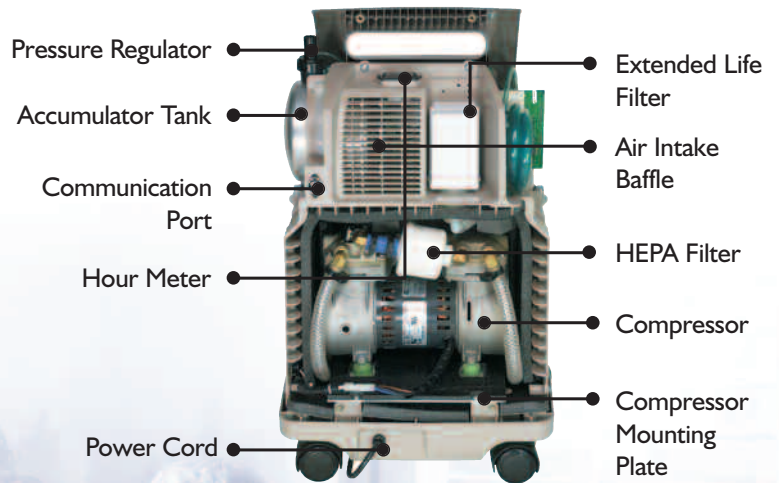
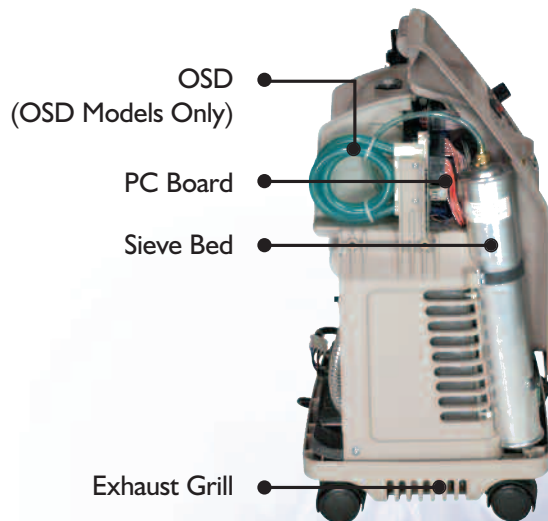
- 35% reduction in system pressure, reducing stress on compressor bearings and internal fittings.
- Lower temperature. The lower heat of compression means longer cup seal life
- Improved energy efficiency. At least 15% power reduction can save patients \$45 to \$60/year* in electricity costs
- Superior OSD, faster sampling rate, increased accuracy and reliability, allows O₂ check every 2 years



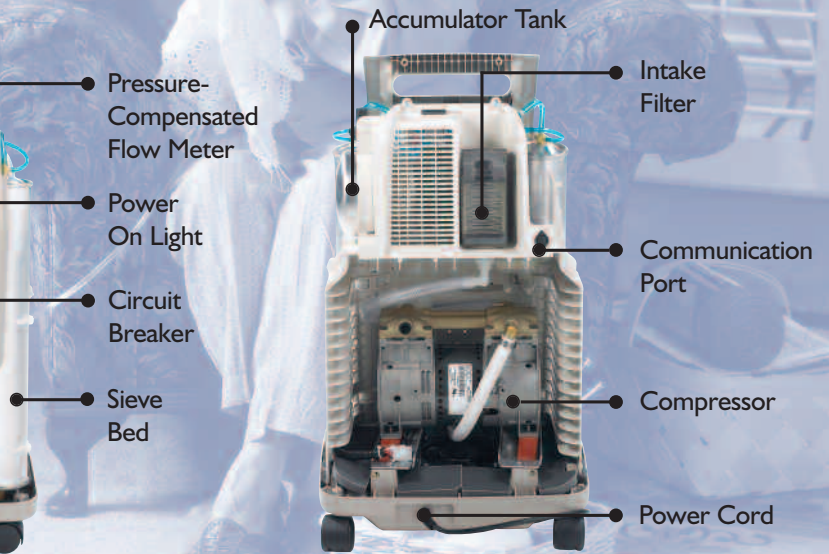
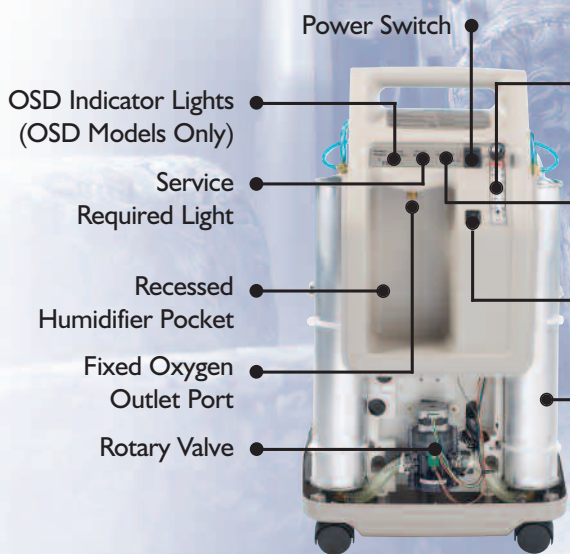
* at \$.09/kwh, and 24 hours/day

Concentrator Features

Three-Liter Concentrator



Five-Liter Concentrator



Conserving Device Accessories

Walkabout™ 1



DeVilbiss PulseDose Conserving Device and Bag (EX3000D-651) for C cylinder
PD1000 Model #PD1WC0
PD4000 Model #PD4WC0

Walkabout 2



DeVilbiss PulseDose Conserving Device and Bag (EX3000D-652) for D cylinder
PD1000 Model #PD1WD0
PD4000 Model #PD4WD0

Hideaway™



Comes complete with ML-6 cylinder unfilled (ML6870), PulseDose Conserving Device, and Bag (EX3000D-654)

Hideaway PD4000 W/O CYL Model #PD4H0
Hideaway PD4000 1 CYL Model #PD4H1
Hideaway PD4000 3 CYL Model #PD4H3
Hideaway PD4000 6 CYL Model #PD4H6
Hideaway PD1000 W/O CYL Model #PD1H0
Hideaway PD1000 1 CYL Model #PD1H1
Hideaway PD1000 3 CYL Model #PD1H3
Hideaway PD1000 6 CYL Model #PD1H6

Walkabout Mini



Comes complete with M-6 cylinder unfilled (M6870), PulseDose Conserving Device and Bag (EX3000D-653)

Walkabout Mini PD4000 W/O CYL Model #PD4WM0
Walkabout Mini PD4000 1 CYL Model #PD4WM1
Walkabout Mini PD4000 3 CYL Model #PD4WM3
Walkabout Mini PD1000 W/O CYL Model #PD1WM0
Walkabout Mini PD1000 1 CYL Model #PD1WM1
Walkabout Mini PD1000 3 CYL Model #PD1WM3

Hideaway™ 2



Comes complete with M-6 cylinder unfilled (M6870), PulseDose Conserving Device, and waist-pack carrying case (PD1000D-654)

Hideaway PD1000 w/1 CYL Model #PD1HW1

Pressure Regulator



Pressure regulator is available in 870-style post configuration. EX3000D-603
0-6 LPM Regulator

Concentrator Accessories

Oxygen Analyzer



- This analyzer checks the oxygen concentration level of concentrators with an accuracy of $\pm 2\%$
- Single switch operation
- Calibrates with the turn of a dial
- Easy-to-read digital display (Part #02ANA)

OSD Model Patient Interface

OSD® (Oxygen Sensing Device) - the optional, patented microprocessor-controlled ultrasonic monitoring device optimizes patient safety:

- Most accurate sensing device ($\pm 2\%$ deviation)
- No maintenance required, no parts to wear out, no batteries to change
- The OSD operates as follows:
 - 85% and above = green LED
 - 84.9-75% = yellow LED
 - 74.9% and below = yellow LED and audible signal

(International models may vary)



Low Output Flow Meter



- Accuracy at low flows (1/8 -2 liters) (Part #515LF-607)

Oxygen Modeling Program



The DeVilbiss Oxygen Modeling Program:

- Gives suppliers access to the costs that drive their businesses
- Analyzes scenarios that show the profit potential of proposed changes
- Ideal for managed care contract bidding

Contact your Sunrise Account Manager for a consultation

Conserving Device Specifications

PD1000 PulseDose LT Compact Conserving Device

Weight	14.7 ounces (16.3 ounces with battery)
Dimensions	4.75"L x 3.4"W x 2.8"H (12.06 cm L x 8.64 cm W x 7.11 cm H)
PulseDose Volumes	Liter flow: 1 1.5 2 2.5 3 4 5 6 cc of O ₂ : 16.5 24.8 33.0 41.3 49.5 66.0 82.5 99.0
PulseDose Continuous Flow Backup	2.0 lpm standard; 3-6 lpm cannula fitting available
Power Supply	(2) Standard "AA" alkaline or NiMH batteries; provide approx. 50 days usage*
Savings Ratio	3:1
Clinical Information	Equivalent to continuous flow. No need to increase liter flow during exercise; PulseDose is rate responsive
Cannula	Single lumen
Contents Gauge	Built into unit. Red zone: 0-500 psi (0-34 bar), Green zone: 500-2250 psi (34-155 bar)
Indicators	Low battery: visual alarm (red LED flashes), Insufficient battery: Visual alarm (Solid red LED), Normal Pulse: visual (green LED flashes)

* Based on 2 lpm, 20 bpm, 4 hrs per day.

PD4000 PulseDose Extended Conserving Device

Weight	22 ounces (26.5 ounces with battery)
Dimensions	2.8"H x 4.4"DIA (7.11 cm x 11.1 cm)
PulseDose Volumes	Liter flow: 0.5 .075 1.0 1.5 2 2.5 3 3.5 4 5 6 cc of O ₂ : 5.0 10.5 14.0 21.0 28.0 35.0 42.0 49.0 56.0 70.0 84.0
PulseDose Continuous Flow Backup	0.5-6.0 lpm (variable)
Power Supply	Standard C alkaline or NiMH battery; provides approx. 60 days usage*
Savings Ratio	4:1
Clinical Information	Equivalent to continuous flow. No need to increase liter flow during exercise; PulseDose is rate responsive
Cannula	Single lumen
Contents Gauge	Built into unit. Red zone: 0-500 psi (0-34 bar), Green zone: 500-2250 psi (34-155)
Indicators	Low battery: visual alarm (red LED) Low pressure/no oxygen: audible alarm with each respiration

* Based on 2 lpm, 20 bpm, 4 hrs per day.

Concentrator Specifications

Three Liter

Model	303DS/DZ
Delivery Rate	1/2 - 3 liters per minute (1/4 liter increments)
Oxygen %	1 - 3 LPM 93% ± 3%
Operating System	Pressure sensing/pressure-vacuum
Sound Level (ANSI)	51 dBA average
Pressure	8.5 psig
Electrical Req.	115V, 60Hz (Int'l models available)
Power Consumption	270 watts average
Weight	37 pounds; w/OSD: 38 pounds
Dimensions	23"H x 13 7/8"W x 12"D; (58.4 x 35.2 x 30.5cm)
Safety Alarms	Audible and Visual: Power Fail, Restricted Flow, Long/Short/No Cycle, High/Low Pressure, Low O ₂ (OSD models)
Approvals	CAN/CSA - C22.2 No. 601.1-M90
Operating Environment	5°C to 40°C; Humidity range of 15% to 95%; non-condensing
Storage Conditions	-40°C to 70°C; humidity range of 10% to 100% including condensation
Warranty	Valving—Warranted for 10 years Optional OSD—Warranted for 10 Years All Other Components—Warranted for 3 years Labor—3 years when sent to Somerset, PA or an authorized Sunrise service center

Extended warranty available. International warranties may vary.

Five Liter

Model	515ADS/ADZ
Delivery Rate	1 - 5 liters per minute (1/2 liter increments)
Oxygen %	1 - 5 LPM 93% ± 3%
Operating System	Timed cycle/pressure swing
Sound Level (ANSI)	48 dBA (515ADZ measured per ISO 3744)
Pressure	8.5 psig
Electrical Req.	115V, 60 Hz, 4.2 AMP (Int'l models available)
Power Consumption	385 Watts Average 515 ADS only = 320 Watts @ 2.5 LPM and below
Weight	50 lbs.
Dimensions	27.75"H x 16"W x 14"D (70.5 x 40.6 x 35.6cm)
Safety Alarms	Audible and Visual: Low Pressure (non-OSD models) Low Flow (OSD Models), Power Fail, Low O ₂ (OSD models), Power On Audible: High Pressure via PR Valve
Approvals	CAN/CSA-C22.2 No. 601.1-M90
Operating Environment	10°C to 35°C, Humidity range of 30% to 75% with no degradation in performance across the voltage range as tested at sea level.
Storage Conditions	-40°C to 70°C, humidity range of 10% to 100% including condensation
Warranty	5 years

International warranties may vary.



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