

Air-Shields® Isolette® C2000



When Reliability Is Important

Air-Shields®
A Dräger Medical Brand

thermal performance





Caring for the youngest patients requires the best and most innovative technology. But as we see it, newborn intensive care also requires something more an emphasis on the NICU as a total environment where infants can receive the therapies they need in a setting that is nurturing, yet designed for flexibility and efficiency.

Our CareArea™ Solution brings together the most advanced ventilation, monitoring and warming technologies available to provide newborns with the highest level of care. We then combine these technologies with sophisticated information management systems to help caregivers make the vital decisions essential to a baby's well being.

Our expertise in intelligent work-place design enhances the productivity of the NICU while also making sure that it's responsive to the needs of the family. The result? An all-encompassing solution for perinatal care that meets the highest standards. Yours.

Our Commitment

Development of the first Air-Shields® Isolette® Infant Incubator in 1947 launched a new age in newborn medical care. Today, more than half a century later, the Air-Shields® Isolette® Infant Incubator remains one of the recognized leaders around the world. In all those years we have upheld a passionate commitment to:

- Pioneer new technologies for newborns and their caregivers
- Simplify equipment ergonomics to support nursing care
- Create environments for superior care of infants





Data Trending

An Air-Shields® Isolette® Incubator's data trending puts crucial information at your fingertips. The unit graphically trends: air temperature, skin temperature, heater power, oxygen and humidity for intervals of 2-24 hours and up to 7 days for baby weight, gain or loss.

Thermal Performance

Consistent air temperature is essential to the development of a premature infant. The Air-Shields® Isolette® Infant Incubator's advanced thermal management capabilities provide a patented Dual Air Curtain that reduces radiant heat loss from the infant by warming the inner hood surface.

Bi-directional air flow

This unique feature minimizes temperature fluctuations within the incubator when the access doors are opened. An innovative microprocessor controller quickly and accurately regulates temperature, humidity and oxygen levels within the incubator.

Internal Noise Level (47 - 49 dBA)

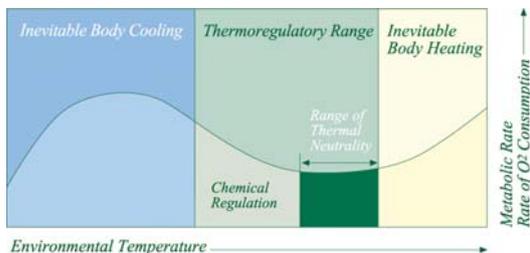
The Air-Shields® Isolette® Incubator's low operating sound levels assure a developmentally supportive environment for infants.

Centralized Care for Multiple Births

Since it allows for co-bedding, the Air-Shields® Isolette® Infant Incubator lets you simultaneously monitor and care for multiple births.

Integrated X-ray Tray

Conveniently located beneath the mattress, the Air-Shields® Isolette® Infant Incubator's X-ray cassette tray slides out smoothly to avoid disturbing the baby...another example of our focus on developmental care.



key features



Superior Infant Access

The Air-Shields® Isolette® Infant Incubator provides front and rear access panels. Two clinicians can simultaneously care for an infant while he or she remains in the incubator, reducing handling and adverse stimulation.

Servo-Controlled Oxygen

Oxygen delivery may be simplified by selecting and controlling whole hood oxygen concentrations from 21% to 65%. Calibration can be performed in room air or in 100% oxygen. The process is quick and easy and can be done while monitoring the infant, without interfering with the thermal environment.

Servo-Controlled Humidity

A front-loading humidity reservoir is easily accessed and requires filling only once every 24 hours. You can set the relative humidity % desired, thus minimizing the infant's evaporative heat loss.

Technical Innovations

Advanced biomedical features provide you with a new level of control during system set-up and offer improved diagnostic tools for system maintenance and troubleshooting.

Advanced Alarm System

- "Ramping" Tone Levels - Audible alarms start quietly and then grow progressively louder, providing you with time to respond before the sound can disturb the infant.
- "Smart" Alarms - Temperature alarms are automatically silenced for a specified time after you change temperature parameters.
- Procedural Silence - When you know a procedure will cause an alarm condition you can initiate a silence period to maintain a quiet environment.
- Visual Eye Level Indicator - A visual alarm is located at eye level on the sensor module to alert you to an alarm condition from across the room.



accessories



Air-Shields® Isolette® C2000 Infant Incubator accessories:

- Incubator in-bed weighing scale MU13060
 Incubator in-bed weighing scale CE ⁽¹⁾ MU13089
 Incubator in-bed weighing scale retrofit kit ⁽²⁾ MU13484

- Servo controlled humidity module MU13217
 C2000, 90-120V MU13218
 C2000, 220-240V – Eng, Sp, Fr, Ger, I MU13219
 C2000, 220V – Swe, Dut, Dan, Fin, Fle, Nor, Por, Gre MU13220
 C2000, 100V – Japan

- Humidity reservoir-reusable MU14919

- Servo controlled oxygen module MU13236
 with Green hose and DISS fitting MU13237
 with Green hose – no fitting MU13238
 with White hose – no fitting MU13239
 with Blue hose – no fitting

- Ventilator tubing support MU12254

- Large storage compartment, swivel type MU12870

- Two shallow organizer compartments MU12880

- Monitoring shelf – low type MU12948
- Monitoring shelf – high type MU12937

- Telescoping IV pole assembly MU12955

- Tank mount MU12952
 Maximum tank size 4 9/16 in (116 mm)
 Maximum tank size length 34 in (856 mm)



(1) Compliant with OIML.

(2) Same as (1) but includes OIML upgrade kit.

Technical specifications

Air-Shields® Isolette® Incubator with VHA stand

Width	38.0 in (99 cm)
Depth	26.3 in (67 cm)
Height	52.5 - 60 in (133.4 to 152.4 cm)
Weight	198 lbs (90 kg)

Air-Shields® Isolette® Incubator with fixed height stand

Width	46.8 in (119 cm)
Depth	26.3 in (67 cm)
Height	56 in (142 cm)
Weight	175 lbs (79.5 kg)

Hood specifications

Mattress tray size	16 x 32 in (40.6 x 81 cm)
Mattress to hood	16.25 in (41.2 cm)
Access panel opening	11 in (28.0 cm)
Standard hood includes	<ul style="list-style-type: none"> • 4 port doors; 2 iris ports; front access panel • 3 left and 3 right tubing grommets-front
Mattress tilt	±12° (±1° C)
Micro air intake filter	99.9% efficiency
Particle size removal	0.3 micron
Air mode control range	20 to 39.0° C
Air mode override	>37.0° C
Air flow velocity	
Across mattress	<10 cm/sec
Skin mode control range	34.0 to 38.0° C
Skin mode override	>37.0° C
Temp. rise time (at 22° C ambient)	<35 minutes
CO ₂ levels	<0.5% when delivered at 750 ml/min at a point 10 cm above the mattress
Operating noise level in hood	47 dBA (49 dBA with Servo Controlled Oxygen)
Casters (4 casters, 1 steering)	12.7 cm (5 in)
RS-232 output	
Controller with LCD	with brightness control
Selectable color combinations	white on blue background (default) or yellow on black background.
Dual-skin temperature monitoring	
6 AC (Mains) outlet	
Keypad lock	
24 Hour trend of:	<ul style="list-style-type: none"> • Air temperature • Skin temperature (1 and 2) • Relative humidity • Oxygen concentration • Heater power

Environmental requirements

Operating temperature range	20° C to 30° C ambient
Storage temperature range	-25° C to 60° C ambient
Operating humidity range	5% RH to 99% RH, non condensing
Storage humidity range	0% to 99% RH, non condensing
Operating RH sensor temp. range	20° C to 41° C
Operating O ₂ sensor temp. range	20° C to 41° C
O ₂ sensor calibration pressure	600 to 900 mm Hg

Alarms

Temperature (limiting ≤)	38.0° C for air temp.<37° C 40.0° C for air temp.>37° C
Baby set temperature	±1.0° C (or ±0.5° C)
Air set temperature	+1.5° C/-2.5° C
High/Low skin temperature	<ul style="list-style-type: none"> • High/low air temperature • High temperature cut-out • Air probe failure • Skin probe failure/disconnect • Low air flow • Low humidity (humidity option) • Low/high oxygen (±3%) (oxygen option) • Oxygen calibration required (oxygen option) • Oxygen cell difference (oxygen option) • Oxygen solenoid failure (oxygen option) • Scale disconnect (scale option) • Too much weight (scale option)

System alarms	<ul style="list-style-type: none"> • Controller failure • Sensor module failure • Sensor module out of position • Motor failure • Power failure • Heater failure • Sensor disconnected • Key stuck
Servo humidity option	
Water capacity	1000 ml
Refill time	>24 hrs @ 85 RH%
Range	30 to 95%
Display accuracy	±6% RH%
Servo oxygen option	
Accuracy	100% cal ±3%
Accuracy	21% cal ±5%
Range	21 to 65%
Resolution	1%
Scale option	
Weight range	0 to 15.4 lbs (0 to 7 kg)
Weight display resolution	1 g or 1 oz (OIML = 10 g or 1 oz)
Weight accuracy	2 g ± 1/2 digit up to 2 kg (OIML = 10 g) 5 g ± 1/2 digit over 2 kg
Weight gain or loss trended over 7 days	
Other options (attach to accessory rail)	
IV Pole weight limit	10.4 lb (4.72 kg)
Monitor shelf weight limit	25 lb (11.4 kg)
Rear access door	Provided with 2 port doors and 4 additional hood grommets 2 left and 2 right
Ventilator tube support	
Oxygen tank mount	
Drawer options	<ul style="list-style-type: none"> • Large deep swivel type • Two shallow swivel out type

Draeger Medical Systems, Inc. reserves the right to make changes without notice in design, specifications, and models.

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The quality management system at Draeger Medical Systems, Inc. is certified according to ISO 13485, ISO 9001 and Annex II of Directive 93/42/EEC (Medical devices).