A refreshing advancement in high-performance thermoregulation.

ISOLETTE® 8000

Dräger. Technology for Life®
Specially developed to create an environment where everyone can thrive

CRITICAL PERFORMANCE
Our ability to reliably sustain a thermo-neutral microenvironment has made Dräger a trusted resource in thermoregulation. Now, innovations in humidification enhance infection control by supporting a more hygienic care setting as well.

LASTING COMFORT
The longer caregiver shifts run, the more they will come to appreciate the many ergonomic touches incorporated into the Isolette® 8000. Easy access to the neonate, convenient height adjustment of the incubator, and easy to reach controls make it a great incubator for any NICU.

INTEGRATED EFFICIENCY
Draeger’s extensive experience in neonatal care and commitment to a smart NICU means you can count on the Isolette 8000 to work seamlessly within your environment. A compact design and a small footprint allow for better maneuverability, more flexibility, and greater access.

We bring to the NICU a legacy of proven concepts that ensure successful outcomes for all concerned. Dräger never stops searching for ways to better meet the needs of neonates, caregivers and the entire NICU team. The Isolette® 8000 is the latest result of these ongoing efforts to introduce advancements that genuinely make a difference.
In the Zone
Critical Performance

- HYPOXIA
- HYPOXEMIA
- HYPOGLYCEMIA
- DEHYDRATION
- DECREASED SURFACTANT PRODUCTION
Safeguard development through precise thermoregulation

HELP PREVENT THERMO-STRESS INDUCED PHYSICAL AND NEUROLOGICAL DAMAGE
The tinier your patient, the smaller your margin for error becomes. Temperature fluctuation can expose low birth weight infants to cold or heat stress that can lead to serious physical and neurological damage, or even create potentially life-threatening conditions.* Yet the Isolette 8000 delivers the advanced thermoregulation features necessary to help keep neonates comfortably within that sliver-thin Thermo-Neutral Zone.

Low air velocity and our proprietary PID temperature control algorithm minimize convective heat loss. Warmed sloped panels and double-wall design reduce irradiative heat loss. Our patented air curtain even prevents significant temperature drops when the access panel is open.

MINIMIZE TRANSEPIDERMAL WATER LOSS
Increasing humidity levels in the microenvironment also has been shown to help reduce transepidermal water loss and related cold stress in extremely low birth weight infants.** When humidification is required, the Isolette 8000 introduces a new level of precision that helps you effectively regulate the humidification process. The key is the compact design of the evaporator chamber, which ensures that only a very specific amount of water is boiled at any given time. This accuracy eliminates the need for a high humidity alarm, further reducing unwanted stimuli that can stress fragile neonates.

Dräger sets the standard for thermoregulation with a host of performance features designed to contribute to a stable, cocoon-like environment for the baby. To ensure that the Thermo-Neutral Zone is maintained, the Isolette® 8000 enables you to continuously monitor both central and peripheral body temperature. This dual temperature monitoring gives you the most accurate early indicator of cold or heat stress, or temperature instability.*

Introducing a hygiene concept that’s pure genius

**ISOLATING CONDENSATE KEY**
**TO INFECTION CONTROL**
For years, neonatologists have carefully weighed the value of humidification in neonatal care. On the one hand, many neonatologists have relied on humidification to successfully reduce transepidermal water loss in extremely low birth weight infants; while other clinicians feel the increased potential for introducing bacterial infections poses far too great a risk. Now, the Isolette 8000 introduces an innovative Condensation Management System specifically designed to further address infection control practices.

This latest technology from Dräger is an advanced system that collects the condensate from the incubator compartment and isolates it from the clean water supply of the humidity system. Since the condensate and clean water supply never mix, you don’t have to worry about introducing bacteria from the condensate into the humidified air. What’s more, the entire humidity system can be easily removed for quick, convenient cleaning after every patient use to maintain the most hygienic environment possible.
The completely self-contained humidification system is specially designed to ensure the easiest possible cleaning. Simply pull out the water reservoir and push out the evaporator to quickly and conveniently autoclave and sterilize the system.

Stress prevention can take many forms. The Isolette® 8000 features a SoftBed insulating mattress to help regulate body temperature, while cradling the baby to reduce the potential for decubitus. To ensure maximum peace and quiet, the sound level within the patient compartment is less than 47 decibels. In addition, an alarm light and ramping alarm system help caregivers tend to alerts while reducing unwanted patient stimulation.
Designed to reduce stress at every turn, bend and twist

Long shifts can seem endless if your equipment isn’t cooperating. That’s why Dräger paid such close attention to the ergonomic details on the Isolette 8000. The way we see it, the very foundation of smart quality of care in the NICU is a fresh, productive care team.

**EASY TO MANEUVER**
Lightweight, compact footprint, smooth trolley assembly, dual casters, and ergonomic foot-actuated brakes allow virtually effortless movement, even in congested NICU settings.

**EASY ACCESS**
Since you want to be able to visually assess your patient without disturbing them, the hood is specially designed and constructed to offer excellent visibility, and retain that clarity over time.

In addition, the baby is accessible from either side of the unit, to facilitate care delivery while minimizing stress.

Generous storage space easily accommodates everything from X-rays to supplies to allow you to stay at the bedside and keep the NICU orderly.
EASY TO MAINTAIN WITH LESS DISRUPTION

Separate grommets for the ventilation circuit, offer easy cleaning while helping hold the tubings in place, reducing stress on the baby.

Check humidification system reservoir water levels at a glance, without even touching the unit.

A generous 1.6-liter water reservoir means less frequent refilling, while the convenient front-accessible reservoir enables refilling without disturbing the neonate.

Ergonomic knobs at either end of the unit enable smooth adjustment of the mattress, from zero to twelve degrees, facilitating Trendelenburg and reverse Trendelenburg positioning.

Super-smooth actuation of the Vertical Height Adjustment control delivers quiet, shock-free movement. It’s one of the many ways the Dräger Isolette 8000 continues to set the standard for performance in Developmental Care.
Since neonates can’t tell you what’s wrong or when their condition is changing, it’s essential to utilize technologies that can help you anticipate patient needs. Dräger’s extensive experience in neonatal care and commitment to a smart NICU mean you can count on the Isolette® 8000 to work seamlessly within your care environment.

Its compact design makes efficient use of your care space while allowing convenient access from all sides. Its maneuverability helps you conveniently navigate through narrow pathways in an ever-changing care space. Plus, care accessories, ranging from baskets, rails and IV poles, to skin probes, ventilation tubes and positioning aids for the baby, work in harmony with our neonatal care solutions to help optimize care processes for maximum efficiency.

PATIENT MONITORING
We have created monitoring systems that sustain a healing environment for vulnerable neonates, while supporting family-centered care. Our goal is to provide the most relevant data moment-to-moment – at the bedside, remotely, and everywhere in between. From the moment the baby is born, through transport, and on to the NICU, our solutions support uncompromising care.

POINT-OF-CARE INFORMATION ACCESS
Thermomonitoring of both central and peripheral body temperature offers critical early insights into the baby’s stability. The ability to access all vital signs, lab results and diagnostic images from a single bedside solution also speeds up response times.

GENTLE RESPIRATORY SUPPORT
To protect the fragile state of the neonate’s lungs, our neonatal ventilators help you stay on top of constant compliance changes. The Babylog® 8000 plus and the Babylog VN500 will help you avoid under or over inflation, helping protect developing lungs while assuring the proper volume is delivered.

JAUNDICE MANAGEMENT
The ability to both easily screen and effectively treat jaundice is crucial to newborn health. Our focus on minimal stress therapies has led us to jaundice screening and therapeutic solutions that are non-invasive, simple-to-use, and highly effective.
### TECHNICAL SPECIFICATIONS DRÄGER ISOLETTE® 8000 INCUBATOR WITH VARIABLE HEIGHT STAND

#### Physical Attributes (without options/accessories)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>132.6 cm to 152.7 cm (52.2 in to 60.1 in)</td>
</tr>
<tr>
<td>Width</td>
<td>104 cm (41 in)</td>
</tr>
<tr>
<td>Depth</td>
<td>75 cm (29.5 in)</td>
</tr>
<tr>
<td>Weight (without options/accessories)</td>
<td>93 kg (205 lb) ±3 %</td>
</tr>
</tbody>
</table>

#### Hood Specifications

Standard hood includes:
- front and rear access panel
- 6 access ports
- 3 left and 3 right tubing grommets – front
- 2 left and 2 right tubing grommets – rear

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access panel opening height</td>
<td>28.0 cm (11 in)</td>
</tr>
<tr>
<td>Mattress tray size</td>
<td>40.6 × 81 cm (16 × 32 in)</td>
</tr>
<tr>
<td>Mattress to hood height</td>
<td>41.2 cm (16.25 in)</td>
</tr>
<tr>
<td>Soft bed mattress size</td>
<td>40 cm × 76 cm × 2.3 cm (15.7 in × 29.9 in × 0.9 in)</td>
</tr>
<tr>
<td>Mattress tilt</td>
<td>±12° (±1°), continuously variable</td>
</tr>
</tbody>
</table>

#### Variable Height Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casters</td>
<td>4 dual wheeled casters, 12.7 cm (5 in) all with friction brake</td>
</tr>
<tr>
<td>Storage volume</td>
<td>Approx. 80 l</td>
</tr>
<tr>
<td>Door closing mechanism</td>
<td>Soft-stop hinges</td>
</tr>
<tr>
<td>Opening angle of the doors</td>
<td>&gt;90°</td>
</tr>
<tr>
<td>Variable height stand accessories</td>
<td>Gas tank mount, Shelf, IV pole</td>
</tr>
</tbody>
</table>

#### Controller System

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algorithm type of the Servo Control System</td>
<td>PID (Proportional Differential Integral) control algorithm</td>
</tr>
<tr>
<td>Controller with LCD</td>
<td>With brightness control</td>
</tr>
<tr>
<td>Selectable color combinations</td>
<td>White on blue background (default) or yellow on black background</td>
</tr>
<tr>
<td>RS-232 output</td>
<td>Yes</td>
</tr>
<tr>
<td>Keypad lock</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Temperature Control Modes

<table>
<thead>
<tr>
<th>Specification</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature control modes</td>
<td>Skin and air temperature control mode</td>
</tr>
<tr>
<td>Air mode control temperature range</td>
<td>20.0 °C (68.0 °F) to 37.0 °C (98.6 °F)</td>
</tr>
<tr>
<td>Air mode control override temperature range</td>
<td>37.0 °C (98.6 °F) to 39.0 °C (102.2 °F)</td>
</tr>
<tr>
<td>Skin mode control temperature range</td>
<td>34.0 °C (93.2 °F) to 37.0 °C (98.6 °F)</td>
</tr>
<tr>
<td>Skin mode control override temperature range</td>
<td>37.0 °C (98.6 °F) to 38.0 °C (100.4 °F)</td>
</tr>
<tr>
<td>Dual-skin temperature monitoring</td>
<td>Yes</td>
</tr>
</tbody>
</table>

#### Trend Parameters

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-hour trend</td>
<td>Air temperature, Skin temperature (1 and 2), Relative humidity, Oxygen concentration, Heater power</td>
</tr>
<tr>
<td>7-day trend</td>
<td>Weight gain and loss</td>
</tr>
</tbody>
</table>

#### Performance

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air flow velocity across mattress</td>
<td>&lt;10 cm/sec</td>
</tr>
<tr>
<td>Temperature rise time at 22 °C (72 °F) ambient</td>
<td>&lt;35 min</td>
</tr>
<tr>
<td>Temperature variability</td>
<td>&lt;0.5 °C</td>
</tr>
<tr>
<td>Temperature overshoot</td>
<td>&lt;0.5 °C maximum</td>
</tr>
<tr>
<td>Temperature uniformity with a level mattress</td>
<td>&lt;0.8 °C</td>
</tr>
<tr>
<td>Correlation of the indicated air temperature to the actual incubator temperature (after the incubator temperature equilibrium is reached)</td>
<td>0.8 °C</td>
</tr>
<tr>
<td>Operating noise level in hood</td>
<td>&lt;47 dBA (without servo Oxygen Control)</td>
</tr>
</tbody>
</table>
# Technical Specifications DRÄGER ISOLETTE® 8000 Incubator with Variable Height Stand

## Servo Controlled Oxygen
- **Carbon Dioxide (CO₂) level (per EN60601-2-19)**: <0.5 %
- **Micro air intake filter**: 99.9 % efficiency
- **Particle size removal**: 0.3 micron

## Servo Humidity Option
- **Humidity control range**: 30 % to 95 % in 1 % increments
- **Humidity control operating time without refilling**: 24 hours maximum @ 85 % RH and 36 °C, in Air Mode
- **Humidity control reservoir capacity**: 1,600 ml
- **Humidity display accuracy**: ±6 % RH (between 10 % and 90 % at 20 °C (68 °F) to 40 °C (104 °F)

## Servo Oxygen Option
- **Oxygen control range**: 21 % to 65 %
- **Oxygen control accuracy of full scale**: ±2 %
- **Oxygen display accuracy (100% calibration)**: ±3 %
- **Oxygen display accuracy (21% calibration)**: ±5 %
- **Oxygen display resolution**: 1 %

## Scale Option
- **Weight range**: 0 (0 lb) to 7 kg (15.4 lb) 1 %
- **Weight display resolution**: 1 g or 1 oz (OIML = 10g 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

## Device Classification
- **Protection class**: Class I, Type BF, continuous operation, not AP
- **Ingress of liquids**: IPX0

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