

# Jain Laboratory Instruments







Product Code . JL-NE-2040

# **Resuscitation System**

### **Description**

## **Resuscitation System**

We believe that a warmer design should take into account both the science and art of the thermal regulation.

To provide the most efficient use of heat we select the appropriate wattage, use the best material for heating element and design the reflectors for maximum effectiveness.

The art involves designing the unit for optimum functionality.

It is an equation we have worked hard to perfect.

Neonatal resuscitation units are commonly used as open care incubator in the delivery rooms, Intensive care units & operation theatres.

They must combine heat control, Resuscitation, Phototherapy unit, space for monitoring systems and complete accessibility to the infant with an optimum medical procedural capability.

### THE ELECTRONIC CONTROLLER:

The controller is based on micro computerized system.

Large bright displays are easy to monitor & for viewing from a distance.

Double digital display system provided to measure the infant temperature and to set the required temperature.

Feather touch keys provided for easy operation.

Bar graph LED system provided to indicate the heater output.

Temperature measured in °C

Manual control system provided.

Fault indication with alarms for Baby probe failure, 1°C temperature high, 1°C temperature low.

High temperature cut-off & Power failure.

**BABY PROBE:** Baby probe is made of highly sensitive sensor.

The probe is interchangeable & field calibration taken care of by software.

The probe is made up of silicon sheathed cable, which allows easy cleaning.

**THERMAL CARE:** Special CE approved 750W ceramic heater is used to ensure fail safe heating and to provide maximum effectiveness.

The chance of breakage of the heater is minimum.

The heater can be easily cleaned.

To ensure proper heating of the mattress.

We match our ceramic heating element to the size of the warmer bed.

Our specially designed parabolic reflector focuses the heat, minimize scatter and achieves superior thermal performance.

**APGAR TIMER:** The Digital Apgar timer is switched on at the moment of birth of the baby and an acoustic alarm will sound after 1.5, 10, 15 and 20 minutes,

remaining to examine the new born according to the Apgar scheme.

**PATIENT BED:** The large patient bed is adjustable to trendelenburg and fowler position.

The Acrylic sidewalls can be positioned upward or downward.

**X-RAY CASSETTE TRAY:** The Neonatal Resuscitation Unit heater box swivels away from bed to make room for an X-ray unit.

Convenient tray assists you to achieve accurate X-rays without disturbing the infant.

**OBSERVATION LAMP:** A Halogen based observation light facilitates to focus the light on any area of the bed.

**RESUSCITATOR** (**OPTIONAL**): Neonatal Resuscitation allows the resuscitation of the distressed newborns in delivery room or in case of emergency.

Reanimation is preformed with positive pressure to the mask or endotracheal tube with manual control and free expiration.

The minimum and maximum pressure values can be preset and are clearly indicated on the manometer.

The Resuscitation operates when connected to the air-oxygen mixer or through any other flow meter.

**ELECTRICAL SLOW SUCTION (OPTIONAL):** The slow suction unit is designed to work on latest diaphragm technology and results in being maintenance free and provides high performance.

This vacuum level can be adjusted with the regulator.

A vacuum gauge is provided to monitor the pressure.

The suction collection jar is unbreakable and it can be easily removed and sterilized.

**PHOTOTHERAPY UNIT (OPTIONAL):** A halogen based phototherapy unit provided for hyperbilirubinemia management.

Three halogen lamps are fitted on either side of the overhead heater box.

It is fitted in an angled position to focus the radiation on the Infant for maximum effectiveness.

**BABY WEIGHING SCALE (OPTIONAL):** A built in digital weighing scale allows you to measure the weight without disturbing the infant.

#### PHYSICAL PARAMETERS:

Mattress 780 mm

Length 490 mm

Width 50 mm

Thickness 920 mm

Working level from ground 920 mm

Maxium baby tray tilt on both sides +/-8°

continuously variable}

Weight 130 kg

Castors 100 mm with 2 brake wheels and 2 non-brake wheels

#### **ENVIRONMENTAL SPECIALTIONS:**

Operating temperature range20°C to 33°CStorage temperature range-25°C to 60°COperating Humidity range0-100% RH

#### **ELECTRICAL SPECIFICATIONS:**

Electrical Supply 230V ± 10%

Power consumption with Heater at max. 750W

output}

Power consumption with Heater, 1250W

Photo therapy and

**observation lamp ON**}

**HEATER:** 

Single element CE approved ceramic heater placed in a

parabolic reflector.

Heater output control range in manual mode: 0 to 100%

### **PHOTOTHERAPY UNIT:**

Supply to each tamp 12 V, 50 W

**Irradiance** 6-8 ?W/cm2/nm at bed level

**SUCTION CONTROL:** 

Maximum suction: 200 mm of Hg

Vacuum gauge range: 0-760 mm of Hg

**OBSERVATION LIGHT:** 

Power required: 12 V, 50 W

**ELECTRONICS:** 

Micro computerized system

**AUXILIARY OXYGEN OUTLET:** 

Oxygen flow control: 1-15 liter/minute

Maximum airway pressure: 55 cm water column

**ELECTRICAL SAFETY:** 

As per IEC 60601-1-2 for medical equipments

**SKIN TEMPERATURE PROBE:** 

Range 28°C to 38°C

**Accuracy** +/-0.2°C within range

**Resolution** 0.1°C

Probe interchangeability +/-0.2°C (Servo)