The **ES-IC-101** from ESSE 3 is simply the most sophisticated neonatal open care system available today. It has been designed to meet the requirements involved in providing care for the preterm infant and to meet the critical situations that may arise in providing such care. **ES-IC-101** is remarkably convenient and user friendly, the space around the infant is organized efficiently.

**WARMER UNIT**
Temperature sensing is performed using a thermistor. The entire warmer unit may be swivelled away on either side when X-ray equipment is used.

**LAMPS**
Two soft-start examination lamps minimize disturbance of the sleeping baby. The lamps are switched on or off and dimmed using Esse 3’s innovative non-touch system. This system ensures that infections are not spread by contact with switches.

**ALARMS**
The unified alarm system facilitates intelligent management of alarms for different alarm situations. Alarms are ramped, thereby reducing noise disturbance. A pilot lamp gives a visual indication.

**HEIGHT ADJUSTMENT**
The height of the bed along with the control and display panel and the warmer unit may be adjusted to your convenience. Foot-operated switches have been provided on both sides of the equipment for adjusting the height easily.

**INSTRUMENT TRAY**
Instrument trays may be placed at six convenient locations.
DISPLAY
The graphic display is integrated with the controls. All vital parameters are displayed clearly in one panel and trended over 24 hours.

PULSE OXIMETRY
Pulse oximetry measurements are performed using well-established technology.

WEIGHING SCALE
The CIC 101 features an in-bed weighing scale, and so the baby does not need to be transferred for weight measurements. The weights of nappies, caps, etc. are automatically discounted.

CPAP
The resuscitation unit features intermittent positive-pressure ventilation (IPPV). The flow-based operation of the CPAP unit is baby-friendly and eases the breathing.

THE BED
The bed also swivels to provide quick access to the infant’s Head for resuscitation in emergencies. This feature also permits close contact with the mother. The bed may be tilted to Trendelenberg and Fowler-like positions after surgery and after a feed. A gas-assisted mechanism tilts the bed smoothly. X-ray trays may be slid into and out of the X-ray compartment without any need to Handle the infant.
ELECTRONICS: SELF CHECKING MICROCONTROLLER BASED SERVO CONTROL SYSTEM.

Physical Dimensions:
- Height adjustment (Foot switch operated from both sides): 1820 mm — 2120 mm
- Length: 1300 mm
- Width: 760 mm
- Weight: 70 kg

LCD graphical display with trend facilities:
- Temperature
- Heart rate
- Weight
- SpO2

Mechanical:
- Castors 5” with brake
- Infant Bed Oval shaped bed for greater accessibility
- Bed tilting at desired angle within: + 12 deg
- Bed rotation: + 60 deg
- X–Ray Provision Provision to take X rays with the help of portable machine without shifting the baby.
- Heater swiveling Provide the rotation of the heater with out disrupt the infant while taking the x – ray
- Bassinet size: 73 cm x 63 cm

Electrical power requirements:
- Voltage rating 230V AC ~ 110V AC ~
- Power rating: 900w
- Fuse rating: 4A 8A
- Frequency: 50 Hz 60 Hz
- IR Heater: 600w 500w
- Leakage current: 0.5mA
- Observation Lamp with Dimmer Controller (Touch free) 12v, 50W (2 Nos)
- Heater life time: 12 months

Skin Temperature probe:
- Range: 26.4 deg. C to 40 deg. C
- Accuracy: + 0.2 deg. C within range
- Resolution: 0.1 deg. C
- Probe interchangeability: + 0.2 deg. C (servo)
- Infant required temperature range (servo): 32 deg. C to 38 deg. C
Alarms: Audio and visual alarms:
- High infant temperature
- Low infant temperature
- Probe failure
- Heater failure
- Power failure
- SpO2: High and low alarms
- BPM: High and Low alarms
- Low battery
- System failure with automatic heater cut off
- High, Low Oxygen Concentration (±5 % from the set valve)
- High, Low Pressure (±2 cmH2O from the set value)
- High, Low Pressure (±2 cmH2O from the set value)

Battery backup:
For NCPAP & Temperature monitoring
1 Hour (Max)

Heater:
Single element 600w quartz infrared heating element placed in a parabolic reflector
Heater output control range (manual) 0 to 100%

Internal weighing scale:
Accuracy 10 grams
Load capacity 10 Kg (Max)

NCPAP: (Optional)
O2 concentration: 21% - 100 %
Pressure: 0 - 20 cmH2O
- Oxygen inlet pressure 2.5 bar to 6 bar
- Air inlet pressure 2.5 bar to 6 bar
- Suction Pressure 0 – 400 mm Hg
- Provided with manometer (digital) 0 to 20 cm H2O
- Supplied with proper air & Oxygen blender
- The patient should be always open to atmosphere and the resistance (PEEP) should be generated by flow
- Patient circuit

MASIMO PULSE OXIMETER: (OPTIONAL)
Oxygen saturation range 1 to 100%
Pulse rate range 25 to 240 BPM
Standard Accessories:
- Height Adjustable IV stand
- Mayo trays
- IV pipe for fixing the accessories

Accessories:
- Supplied with bonnet and cap for correct fixation of nasal prong
- Supplied with 3 sizes of prongs (small, medium & large)
- Provided with PEEP generator near baby to ease respiratory effort by the baby and reduce dead space

Coating:
- Epoxy/Powder coating for scratch resistance and rust protection

Electrical Protection
- Type of protection against electric shock: Class 1
- Degree of protection against electric shock: Type B
- Mode of Operation: Continuous
- Protection against hazards of explosion: Not Protected
- Protection against ingress of liquids: Not Protected

Environmental Specifications
- Temperature Range: 18°C to 30°C
- Relative humidity Range: 10% to 75% RH
- Atmospheric pressure: 700 to 1060 hPa

Transport and Storage:
- Temperature Range: 10°C to 60°C
- Relative humidity Range: 10% to 90% RH
- Atmospheric pressure: 500 to 1060 hPa