

**Salient Characteristics of the Highflow  
Humidifier & Heated Humidifier:**

- System shall have Ultrasonic Analyzer which will use technology to allow the machine to adjust on its own and require no calibration for the life of the product.
- Temperature must be controlled independently at the chamber and breathing circuit.
- Heated Humidifier must be able to reach optimal humidity of 37 degrees Celsius, 44mg/L of Absolute humidity.
- Shall reach an essential humidity of 31 degrees Celsius, 32mg/L, and 100% Relative humidity.
- Heated Humidifier must be dual limb with a heated wire to provide temperature control to the heated gases.
- Heated Humidifier must have a clinical alarm system and the ability to sense humidification to minimize the nuisance alarms
- Shall be compatible with ET tubes, free motion masks and Optiflow mask.
- Its delivery system shall have:
  - a) A dual float auto feed chamber ensuring constant compressible volume for effective therapy delivery.
  - b) A dual spiral heated wire to ensure even heat distribution
  - c) Shall contain Evaqua membrane technology to clear humidity from the expiratory limb

**High Flow Humidifiers:**

- Shall comply with ISO 8185:2007 standard for humidity output
- Must have Oxygen delivery system from 21-80%
- Shall contain a wide flow range 5-50L/min, incrementing in 5L/min.
- Shall integrate Oxygen mixing
- Shall have inbuilt Oxygen sensor
- Must not require probes or external air supply.

- System shall have Optiflow nasal technology with condensation control to dissolve water vapor droplets.
- System shall be an all in one high flow delivery system
- System must be able to provide 60 L/min to the patient
- Must have a Default setting to provide anywhere from 10-60 L/min\
- Must have adjustable airflow with three temperature settings (37, 24, 31 Degrees Celsius)