

(54) Title of the invention : Parameter monitoring of incubator using IoT and Cloud

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(57) Abstract :

The present invention relates to a Smart Infant Incubator System designed to provide enhanced monitoring and care for premature and critically ill newborns. The system integrates various sensors to continuously monitor vital health parameters such as body temperature, heart rate, respiration rate, oxygen saturation, and weight. Data collected by these sensors is transmitted wirelessly to a cloud-based storage platform, enabling healthcare professionals, parents, and caregivers to access real-time information remotely via a mobile app or web interface. The system is equipped with an alert mechanism that notifies healthcare providers when any monitored parameter falls outside a predefined safe range, ensuring timely intervention. Additionally, the incubator includes energy-efficient components, a backup battery for uninterrupted operation, and telemedicine features for remote consultations. This innovative design offers a reliable, scalable, and cost-effective solution for neonatal care, improving infant survival rates and reducing the need for constant physical presence by medical staff.

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