



neoGuard™

a wearable neonatal vital signs monitor

Our first product is a 4-in-1 monitoring device designed specifically for patients in resource-constrained hospitals in emerging markets. The system helps overburdened healthcare workers better manage their patients, and improves speed of action for newborns in distress so that they have the best chance to receive the care they need to survive and thrive.

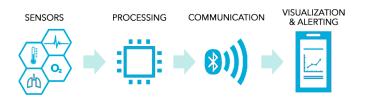
How it works:

The small device is attached to the forehead with a reusable band, and continuously measures four critical vital signs. The data from multiple devices are wirelessly displayed on a tablet in real time. Health workers are alerted when vitals go outside the healthy range.

Features:

- 24/7 measurement of pulse rate, respiratory rate, blood oxygen saturation (SpO₂), and temperature
- Rugged, portable, easy-to-use device that is easily sanitized and reused
- Rechargeable, long-lasting battery
- Visual and auditory alerts to aberrant vital signs
- Comprehensive data collection and historical trend displays for clinical guidance
- Out-of-the-box system not reliant on continuous power or wireless connectivity
- Local training, maintenance, and product support





Monitoring Performance:

Pulse Rate	Range: Resolution: Accuracy:	20-250 bpm 1 bpm ±3 bpm or ±3%
SpO ₂	Range: Resolution: Accuracy:	0-100% 1% ±4% (70-100%)
Respiratory Rate	Range: Resolution: Accuracy:	5-30 brpm 1 brpm ±5 brpm
Temperature	Range: Resolution: Accuracy:	30-40 °C 0.1 °C ±0.2 °C, after 10 minutes

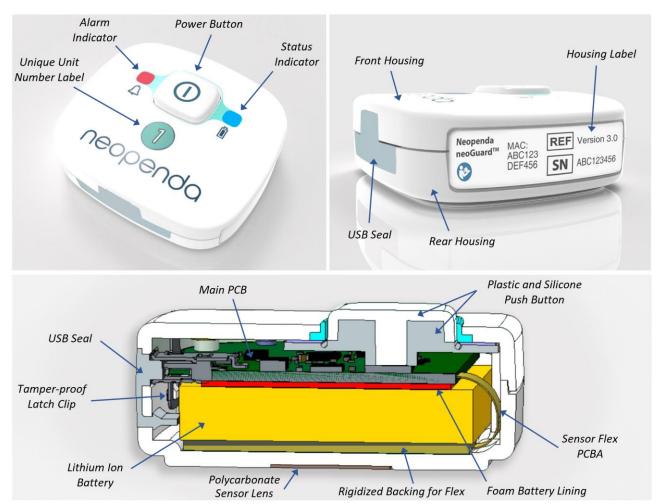
Specifications:

Model No.	neoGuard V3.0	
Size	Sensor device: 42x36x14 mm Band length: 38 cm	
Weight	22 g	
Materials	Medical grade plastic and silicone	
Battery	IEC 62133 certified Runtime: 36 hrs	
Package Size	5-15 wearables & 1 tablet	
Shelf Life	2 years	



Components of neoGuard:

- Tablet configured with central monitoring application software
- Reusable wearable headband made of soft flexible silicone rubber, adjustable from 25 to 38 cm
- Sensor device:



Indicator Lights:

Immediately After Powering On



- -1 second pause, then-
- Right LED White, 0.5 second blinks: Battery charge level
 - 1 blink: 0-25% charge
 - 2 blinks: 26-50% charge
 - 3 blinks: 51-75% charge
 - 4 blinks: 76-100% charge
 - -1 second pause, then begin status indicator pattern-

Left LED (Alarm Indicator)

Red, blinking every 0.5 seconds (2 Hz, 20% on):
Alarm condition
triggered; vital sign(s)
out of range

Both LEDs

Purple, blinking every
0.5 seconds for 15
seconds (2 Hz, 50% on):
"Locate" button
pressed in the app

Right LED (Status Indicator)

- Blue, blinking every 1 seconds (1 Hz, 20% on):
 Device is waiting for BLE connection
- Purple, 1 second long flashing pattern: BLE connection established
- Blue, blinking every 5 seconds (0.2 Hz, 70% on): BLE is connected and operating normally
- Yellow, solid: Device battery is low
- Yellow, blinking every 2 seconds (0.5 Hz, 20% on): Technical error on device detected
- White, blinking every 2 seconds (0.5 Hz, 20% on): Battery is charging
- White, solid: Battery charging complete