

Universal Clip-On Health Monitoring Device for Wristwatches



Intellectual Property:

IN 202521053722 A

Inventor:

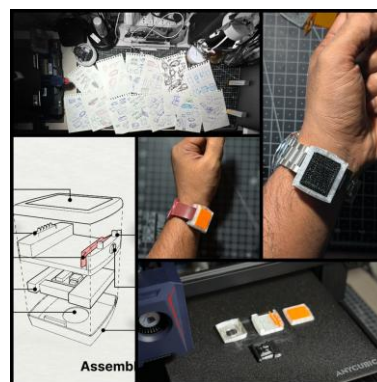
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Category:

Biomedical Engineering

Application:

- Healthcare
- Lifestyle tracking
- Research and Public Health
- Inclusive wellness



Technology:

The Universal Clip-On Health Monitoring Device is a modular wearable that attaches to any wristwatch strap, preserving the style and value of traditional timepieces while adding key health features. With sensors for heart rate, SpO₂, and activity tracking, it delivers feedback via LED or haptic alerts. Its upgradable, replaceable modules reduce e-waste and extend usability.

Problem Addressed

- Eliminates the need to abandon traditional wristwatches for bulky smartwatches/fitness bands.
- Reduces e-waste by enabling modular upgrades instead of full device replacement.
- Provides a simple, intuitive solution for elderly and non-digital users.
- Increases compliance and data quality in clinical/research deployments.

Key Advantage

- Works with any existing watch strap; no need to replace personal watches
- Modular design allows upgrades or replacements without discarding the whole unit
- Simple LED/haptic feedback makes it accessible to elderly and non-technical users
- Lightweight, discreet, and easy to adopt in daily life
- Improves compliance in research and healthcare settings

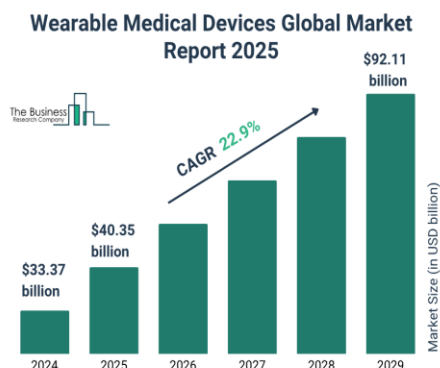
Market Forecast

Key features

- Heartbeat Sensor
- LED Indicator
- SpO₂ Sensor
- Vibration Motor
- Motion Sensor

Key USP and Advantages

- **Universal Fit** – Clips onto any watch strap, no need to replace wristwatches.
- **Modular** – Upgradable parts reduce cost and e-waste.
- **Simple Feedback** – LED/vibration alerts, easy for elderly users.
- **Light & Discreet** – Comfortable and less intrusive than smartwatches.
- **High Adoption** – Ideal for healthcare and research due to ease of use.



Ref: thebusinessresearchcompany.com

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