

Commercial & Technical Product Brief

Contactless bed-based physiological monitoring for hospitals, eldercare and individual home use.

1. Product proposition

Dozemate is a bed-based physiological sensing system that monitors a person while resting or sleeping without requiring a wearable. A slim piezoelectric sensing strip is positioned in the bed and connected to a compact processing unit. Mechanical physiological signals are acquired and processed to derive continuous monitoring outputs.

BED SENSOR	PROCESSING UNIT	CONNECTED LAYER	APPLICATIONS
Mechanical physiological signals	Signal acquisition & embedded processing	Secure device/data connectivity	Organisation dashboard & individual app



Physical configuration

A slim sensing strip is placed under the top sheet / mattress topper near the upper body, with a compact processing unit positioned at the bedside. The system is designed for unobtrusive monitoring during normal rest and sleep.

No wearable is required.

2. Monitoring outputs and software

Core physiological outputs	Heart rate (HR), respiratory rate (RR)
Context / supporting signals	Movement, occupancy / bed presence
Sleep-related outputs	Snoring, sleep-stage and other sleep-related insights within the product platform
Organisation interface	Patient onboarding, device status, multi-bed live monitoring, reports, configuration and longitudinal review
Individual interface	Personal physiological and sleep data, trends, insights and suggested improvements

3. Deployment models

Hospitals & healthcare Multi-bed monitoring, longitudinal physiological review and workflow integration.	Eldercare / assisted living Unobtrusive overnight monitoring where continuous wearable compliance may be difficult.	Individual home use Personal monitoring through the Dozemate app without wearing a device during sleep.
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Readiness, integration & partnership

Dozemate is a working product platform moving from technical development into structured clinical evidence generation and commercial partnership development.

4. Current evidence and product maturity

Product	Working bed-sensing hardware, embedded processing, connected organisation dashboard and individual-user application.
Clinical programme	Hospital clinical evaluation in India is focused first on HR, RR, technical reliability and usability. A structured clinical evidence programme is being developed around these priorities.
Additional outputs	Snoring and sleep-related outputs are available within the platform; respiratory-event and other derived clinical claims require separate evidence and are not presented here as validated diagnostic claims.
International readiness	European regulatory and product-readiness planning is underway. Dozemate is not currently represented as EU MDR-certified / CE-marked.

5. Architecture & integration considerations

- Embedded physiological signal acquisition and processing form the device-side sensing layer.
- BLE supports provisioning / live waveform use cases; Wi-Fi connectivity supports connected product operation.
- Raw high-frequency piezo waveform is not uploaded as part of normal cloud monitoring; live raw waveform is available locally over BLE when required for the application graph.
- Microphone-derived snoring processing is designed so that bedroom audio / PCM is processed locally rather than transmitted as an audio stream.
- Organisation software and the individual app create multiple integration pathways; API / platform integration can be explored with healthcare and connected-health partners.
- Hardware, firmware and algorithm version control are being incorporated into the clinical evidence programme.

6. What we are seeking from Dutch partners

Commercial & market access	Distributors, resellers, healthcare technology companies and partners with access to hospitals, eldercare, home health and remote-monitoring markets.
Healthcare platform integration	Partners interested in incorporating contactless bed-based physiological monitoring into existing digital-health, RPM, care-management or monitoring platforms.
OEM / licensing	Organisations interested in integrating Dozemate or SlimIoT sensing capability into broader products and solutions.
Engineering & manufacturing	Product engineering, DFM/DFT, miniaturisation, electronics manufacturing, testing and scalable OEM/ODM relationships.
Semiconductor & sensing collaboration	Sensors, analogue front ends, low-power processing, power management, connectivity, edge processing and next-generation sensing architectures.
Clinical / R&D; collaboration	European research organisations, healthcare institutions and technology partners interested in complementary validation and joint R&D.;

PARTNERSHIP OBJECTIVE

We are looking for partners who can help deploy, integrate, scale or extend a working physiological-sensing platform - while building longer-term India-Netherlands relationships in connected health.

SlimIoT Technologies Pvt. Ltd. | India | www.slimiot.com | www.dozemate.com

Public partnership brief. Detailed technical architecture, clinical protocols, unpublished validation data and proprietary implementation information are shared selectively as appropriate.