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(57) Abstract :  
 An improved wearable biometric authentication device (100) enables continuous user verification using ECG (110), skin conductivity (120), and motion sensors (130), integrated into a compact wearable form (180). A processing unit (140) with AI module (150) analyzes real-time biometrics, maintaining secure sessions via encrypted communication (170). The power unit (160) ensures extended use with energy-efficient operation. This invention offers robust security by dynamically verifying identity throughout device usage, preventing unauthorized access in sensitive environments.

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