



Nymi Connected Worker Platform

A Comparison of Biometric Authentication Solutions



This paper reviews security, privacy, and user experience (UX) considerations when choosing between conventional biometric access options and the Nymi Connected Worker Platform.

Conventional biometric scanners (iris, palm, fingerprint mouse)

Security and Privacy

- Store biometric template centrally. This creates privacy and security risk as data stores are hacked and sold on the dark web by the 10s of millions.
- Require access to either a central system (which increases the threat surface for protected networks) OR to have authentication systems spread across operational systems, which increases IT complexity and hampers GDPR “right to be forgotten” compliance.

User Experience

- Cannot be used with PPE
- Requires user to scan every time for identification (authorization or digital signature).

- If security/data integrity is important, then MFA may be required. In these cases, workers must also provide a second factor (pin, password, keycard/FOB/token, etc.) This is inefficient and often not possible when the user is wearing PPE.

The Nymi Connected Worker Platform connects workers as a service making it safe, secure and simple

Nymi's Security and Privacy

One activation per day/shift establishes continuous multi-factor authentication. This is “something you have” (encrypted credentials on the Nymi Band™) and “something you are” (fingerprint).

A system of preventative and detective controls provides the highest identity assurance and data integrity:

- Biometric template is securely stored on the device, and nowhere else.
- All communications are encrypted (biometric, communications).

- All user data and biometrics can be easily erased by IT or the user at any time even with segmented or air-gapped environments.
- Hands-free, continuous MFA with On-Body Detection (light, motion, capacitance) to ensure that activated credentials are not used by anyone other than the rightful owner.
- Non-Repudiation (cannot be replicated).
- Presence-awareness allows digital systems to know if the user is nearby. This improves security and usability (automatically lock systems, removing a burden from the user).

Extensible to endless use-cases: Access to all enterprise systems, buildings, elevators/doors, lone worker, worker density, health & safety, and more.

Total Cost of Ownership can vary dramatically - consider costs associated with worker efficiency, security/privacy exposure, IT efficiency, and contamination risk.

Nymi's User Experience

- Simple, fast, consistent, and safe across any number of networks (IT/OT/PACS)
- Hands-free, fast, and contactless (eliminates the real and perceived risk of infection transmission through communal surfaces)
- Cleanable to IP66 & 67 Ingress Ratings. Can be stored in gowning rooms. Because the user is verified one time, before gowning, it works contactless under PPE.