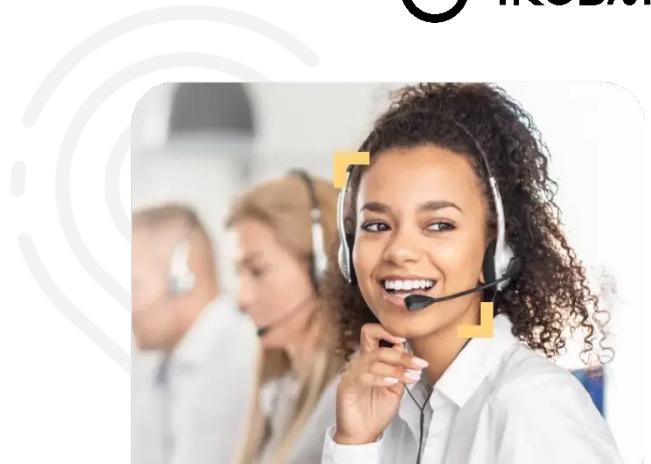**DATASHEET**

1Kosmos BlockID 1Key Biometric Security Key

Deploy biometric authentication to secure users in restricted environments

It's well-known that password-based authentication is difficult, if not impossible, to deploy in diverse environments like call centers, manufacturing floors, and clean rooms. Mobile devices are not permitted, thus eliminating the traditional biometric passwordless approach to authentication, and biometric tokens are costly and limit scalability. Relying on passwords and MFA is no longer an option; until now, there was no clear path forward.

The 1Kosmos BlockID 1Key Advantage

The 1Kosmos 1Key Biometric Security Key emphasizes interoperability across diverse and complex environments, delivering a biometric passwordless authentication for users on multiple kiosk systems located at different locations. This approach guarantees the elimination of passwords for desktop login, applications, and services. Furthermore, this interoperability will be achieved for any user onboarded with the biometric security key on any supporting desktop in the environment.

1Key is a FIDO-compliant token unlike any other. They facilitate seamless interoperability across Kiosks by linking the captured biometric to the user account. This biometric authentication frees organizations from purchasing and distributing FIDO keys for each user, only to have users forget, break, or lose them, resulting in significant cost savings. 1Kosmos FIDO2 authentication is certified by the FIDO Alliance.

The 1Kosmos 1Key can be utilized for Windows login without requiring separate registration. Our "register-once-use-anywhere" strategy ensures that users only need to be registered once in the control plane.

1Kosmos has several advantages over traditional password-based authentication, including enhanced security, improved usability, and better resistance to phishing attacks.

Our solution relies on public key cryptography, so even if a user's credentials are compromised, an attacker would not be able to use them without also having access to the user's public/private keys.

1Key authentication frees organizations from purchasing and distributing FIDO keys for each user

1KOSMOS FEATURES AND BENEFITS

→ Deploy a register-once-use-anywhere strategy to ensure that users are workstation-independent

→ 1 key per protected desktop vs. 1 key per user

→ Implement biometric authentication on the web via WebAuthn

→ Implement trust-on-first-use (TOFU) security for desktop or kiosk desktop login

→ Support for multiple FIDO authentication methods, including – Biometric Security Key

Reasons to Consider

	1KOSMOS	Traditional Fido Keys
Cost	$	$ - $$$
# Keys	1 Key per protected desktop	1 key per user
User Management	Multiple users and biometrics per managed key	1 key per managed user
Account Management	Authentication on any deployed key	Authentication only on provisioned key

The only advanced biometric authentication solution for dynamically assigned workspaces

1Kosmos Biometric Security Key

32bit Crypto RISC Processor
Algorithms : ECDSA, SHA256, AES, HMAC
Acceleration : RSA, ECC, ECDH
Keys Mgmt : Hardware bound Keys (TRNG)
Security : Dedicated Hardware for protection against Physical and SPA/DPA/SEMA/DEMA attacks

360° Fingerprint Sensor
Fingerprint Sensor : FPC
Resolution : 160 x 160 pixels
Definition : 508 DPI
Sensor Life : Over 200,000 times
Automatic Learning : Yes
False Acceptance Rate : <0.001%
False Reject Rate : <1%

USB 2.0 Type-A connectivity
Durability : More than 30,000 insertion cycles

Multi-color LEDs indicates Authentication status

Compact & Secure Metal case with easy grip

1Kosmos 1Key
1Kosmos BlockID provides an open, scalable and interoperable passwordless approach to organizations where workers are dynamically assigned a workspace – hoteling, clean rooms, etc.

Passwordless Access
Leveraging the biometric security key, 1Kosmos BlockID 1Key gives organizations a way to enforce access controls and improve user experience. All enrolled employees will use their biometrics to log in to a supporting desktop without the use of a password.

Simple Registration
Users will register their biometrics at the time of onboarding and will then have passwordless access to any supported desktop. The register-once-use-anywhere strategy will improve onboarding and eliminate passwords for enrolled users.

Compatibility / Usability
Enrolled users enter/select their User ID on the supporting desktops and then authenticate with their enrolled fingerprint for passwordless authentication.

About 1Kosmos