TOKEN2 Sàrl
Geneva, Switzerland
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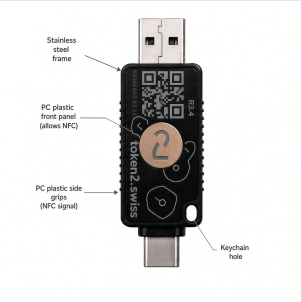
Token2 PIN+ Dual Ace R3.4 - NFC FIDO2.1 Security Key with Metal Frame

Part no: PINPlusDualAce · T2-125



Description

The PIN+ Dual **Ace** is an NFC-enabled FIDO2 Security key with both USB-A and USB-TypeC ports, featuring PIN complexity at the firmware level. Unlike the standard PIN+ Dual, the Ace model features a **stainless steel frame** for superior durability and a premium feel, with front and back panels and side grips made of PC (polycarbonate) plastic to ensure unobstructed NFC signal transmission. Having an NFC chip onboard allows using this FIDO2 key with modern smartphones natively. This model features two capacitive sensor-type touch buttons, located on the front and back panels. With Release 3.4 of our PIN+ Series you can also add an optional OTP protection.

> **Ace** first, with an echo of **acier**: a stainless steel frame wrapped around the core, built to be sturdier.

Firmware 3.4 Release

Version 3.4 builds on the functionality introduced in Release 3.3 and adds the following enhancements:

- Enhanced PIV security and protocol support.
- **Secure Messaging (SM):** Added encrypted communication support.
- **Advanced OTP Security:** Password-protected OTPs with a security lockout after 100 failed attempts and a 5-minute authenticated session for OTP operations.
- **Optimized Stability:** Improved USB-C compatibility for certain devices and added high-voltage protection for secure use with docking stations.

FIDO security keys are small USB dongles that enable secure login to websites and applications supporting FIDO2 WebAuthn and classic FIDO (U2F) standards.

PIN+ security key combines hardware-based authentication, public-key cryptography, TOTP/HOTP, U2F, and FIDO2 protocols to protect your accounts. This type of security device provides the highest level of multifactor authentication for user accounts with Twitter, Facebook, Gmail, GitHub, Dropbox, Dashlane, Salesforce, Duo, Centrify, and hundreds more HOTP, U2F, and FIDO2-compatible services. No additional tools or applications are required, and the login process is simple and reliable. Just insert the Security Key into a USB slot and authenticate with a simple touch. The security key does not require a battery nor network connectivity - it is always on and accessible.

Specifications

Model Number	Token2 PIN+ Dual Ace R3.4
Body material	Stainless steel frame with PC (polycarbonate) front and back panels and side grips (NFC-compatible)
Button	2 x capacitive touch buttons (front and back panels)
Functions	FIDO U2F + FIDO2.1 WebAuthn/CTAP + PIV + OpenPGP + HOTP (HID) + TOTP
Embedded security algorithm	ECDSA, SHA256, AES, HMAC, ECDH
PIV	NIST SP 800-73 Secure Messaging (SM) over NFC
OpenPGP	RSA2048, RSA3072, RSA4096 secp256r1, secp256k1, secp384r1, secp521r1 ed25519, x25519 User Interaction Flags (UIF), Key Derived Function (KDF)
SSH with FIDO Support	ecdsa-sk & ed25519-sk
Interface type	NFC, USB-A and USB-TypeC
Firmware	FIDO 2.1 Token2 PIN complexity enforcement
Maximum FIDO2.1 Resident keys	300
Maximum OTP profiles	50 TOTP/HOTP via the app + 1 HOTP via HID
OTP security	Optional OTP protection password Lockout after 100 failed attempts; 5-minute authenticated session
Lifetime	At least 10 years
Programming cycles	100,000 times
Communication protocol	CTAP2.1, HID, NFC
Working voltage	5.0V DC
Input Current	35mA
Power	0.18W

Working temperature	-10℃ - 50℃
Dimensions	56mm x 19.3 mm x 8 mm
Storage temperature	-20℃ - 70℃

Durable Metal Construction

The Ace model features a stainless steel frame, providing enhanced protection against impacts, bending, and everyday wear compared to plastic-bodied keys. The PC (polycarbonate) front and back panels and side grips are precision-engineered to allow the NFC antenna to operate without interference, while the PCB retains a specialized protective coating for enhanced water resistance.

TOTP Feature

PIN+ Security key can securely store the secrets for your TOTP profiles but requires a companion app (available for Android, iPhone, and Windows, as well as a cross-platform Python tool allowing it to run under Linux, macOS, and similar systems) to generate the OTPs. With Release 3.4, OTP profiles can additionally be protected with a password: after 100 failed authentication attempts the OTP function is locked out, and a successful authentication opens a 5-minute session for OTP operations.

Specifications

GENERAL	
Form factor	USB key with Metal Frame
Interface	USB-A, USB-C, NFC
Manufacture type	Token2 Controlled (firmware and hardware)
CONNECTIVITY	
USB-A	Yes
USB-C	Yes
NFC	Yes
Smart card	No
OTP	
OTP protocols	OTP with password protection
TOTP	Yes
HOTP	Yes
OTP Profiles	50
FIDO	

U2F	Yes
FIDO certification	L2
Minimum PIN policy	6 digits, complexity enforced
OpenPGP support	Yes
PIV support	Yes
Biometric	No
Number of Passkeys	300
AAGUID	eabb46cc-e241-80bf-ae9e-96fa6d2975cf
DIMENSIONS	
Dimensions	56x19.3x8
Keyring slot	3 × 4 mm opening, 7 mm deep (through the full thickness of the key). Fits keyrings with a thickness of <2 mm