

KeyShare Puck

The Puck is a compact NFC terminal that replaces four separate devices — keycard encoder, physical ID scanner, standalone payment terminal, and loyalty enrollment kiosk — with a single tap interaction. Designed for hotel front desks, self-service kiosks, and building reception areas.

✓ Wallet Keys

✓ Digital ID

✓ Payments

✓ Loyalty

✓ Self-Service

✓ Offline

Physical

Dimensions	110 × 110 × 35 mm
Weight	~280g (incl. battery)
Size reference	About the size of a drink coaster
Enclosure	ABS + PC blend, UV resistant
Colors	White (standard), Black (optional)
Cable	USB-C, 1.5m, included
Mounting	Desk stand (incl.), VESA 75mm, counter flush, kiosk
Operating temp	0–40°C (32–104°F)
Storage temp	-20–60°C
Humidity	10–90% RH, non-condensing
IP rating	IP20 (indoor use)

NFC and Wireless

NFC protocols	ISO 14443A/B, ISO 18013-5, NFC Forum Type 4
Wallet protocols	Apple VAS, Google Smart Tap 2.1
NFC read range	3–5 cm nominal, 2 cm minimum
Credential detection	< 500ms
mDL full read	< 2 seconds
Wallet key write	< 1 second
BLE	Bluetooth 5.0
QR scanner	1D/2D, 5–30 cm range

LED Feedback States

Idle	White breathing
Ready	Blue solid
Processing	Blue chase
Success	Green solid
Error	Red solid
Offline	Amber pulse

Core Hardware

Controller	Raspberry Pi CM4 (2GB RAM, 8GB eMMC, WiFi)
HSM	ATECC608B — secure key storage, non-exportable
RCM	KeyShare-proprietary NFC/BLE RF module
Display	2.8" IPS LCD, 320x240, 250 nits min
Audio	I2S codec + 1W speaker
LED ring	16 RGB LEDs, individually addressable
Battery	Li-Po 1500mAh, 30+ min UPS backup
Buttons	Reset (10s hold), Pair (commissioning)

Connectivity

Primary	USB 2.0 (Ethernet-over-USB) to host PC
Puck IP	192.168.100.1 (static, point-to-point)
Control API	HTTPS (TLS 1.3) on port 8443
WiFi	802.11 b/g/n/ac (available, not required)
Firewall	None — communicates only with host PC

Power

Input	USB-C (5V from host PC)
Typical draw	< 5W
Peak draw	< 8W (NFC + display + audio)
Battery backup	30+ min on internal battery
Charging	Automatic via USB-C

Lifecycle

Design life	5 years (hotel lobby environments)
NFC antenna	Rated for continuous commercial use *
Display	Continuous operation rated *
Battery	800+ charge cycles to 80% capacity *
Firmware	OTA updates, field-serviceable

* Lifecycle specifications are design targets. Final certified figures will be published upon completion of production validation testing (PVT, target Q2 2026).

Security

Feature	Specification
HSM	ATECC608B — I2C, secure key storage, non-exportable keys, Common Criteria EAL5+
Certificates	Device: C509 (CBOR), hardware-bound, 15-year validity, factory-provisioned. mTLS: X.509v3, 90-day auto-rotation, HSM-stored.
Boot / Firmware	Verified secure boot chain (signed images only). OTA firmware updates, cryptographically signed, automatic rollback on failure.
Tamper detection	Conductive mesh under enclosure — triggers lockout, alert, HSM zeroization
Credential storage	None — all data processed in volatile memory only, never persisted
Encryption	TLS 1.3 for all API communication. AES-256 at rest.

Regulatory Compliance

Certification	Status
FCC Part 15 (USA), CE Marking (EU)	In progress — targeting pre-GA certification
UL/IEC 62368-1 (Safety)	In progress
RoHS / WEEE	Compliant by design. Lead-free solder, recyclable packaging, battery recovery program.

Software and Integration

Component	Specification
OS / Runtime	Raspberry Pi OS (Debian), Linux kernel 5.x, Python 3.11+, asyncio
Control API / SDK	HTTPS REST, TLS 1.3, JSON, challenge-response auth. SDK: Node.js (NPM), Python (PyPI), REST.
Hotel integration	Via GEP Local. PMS: Apaleo (✓), Oracle Opera (✓), Mews (✓), BookingCenter, Shiji, others. Locks: Assa Abloy (✓), Salto (✓), dormakaba (in progress), Onity (planned).
Physical access (PACS)	Via KeyShare Connect. Mercury panel integration, NFC-based building access and visitor management.
Government	Credential verification platform. ISO 18013-5 / EUDI ARF compliant.

Host System Requirements

Requirement	Specification
Operating system	Windows 10+ (64-bit), macOS 12+, or Linux (Ubuntu 22.04+ / Debian 12+)
RAM / Storage	4 GB RAM minimum (8 GB recommended). 2 GB storage for GEP Local Instance.
USB	USB 2.0 minimum, dedicated port recommended. Max 5m with active extension cable.
Network	Internet recommended for cloud sync and OTA updates. Not required for core operations.
Multi-Puck	Multiple Pucks per GEP Local Instance supported. Each Puck requires a dedicated USB port on the host.

Accessibility

Feature	Implementation
Visual + Audio	LED color + distinct animation patterns (colorblind-safe). Paired audio cues for every state. Volume adjustable.
Display	WCAG 2.1 AA minimum (4.5:1 contrast). Primary text 18pt+.
Mounting / Interaction	ADA reach range: 15–48" (kiosk). Tap-based — no buttons or touchscreen. Works regardless of grip or dexterity.

What's in the Box

- Puck unit • USB-C cable (1.5m) • Desk stand • Quick start guide • Safety card
- Optional: Wall mount (VESA 75mm), counter flush mount, kiosk bracket.

Ordering and Support

MSRP: \$399/unit. Volume pricing for multi-property. **Warranty:** 2-year standard (parts + labor). Advance replacement RMA: shipped within 2 business days. Extended warranty available (up to 5 years).

Contact: keyshare.id/contact | **Product page:** keyshare.id/products/puck | **PACS specs:** Contact sales

Specifications subject to change. Confirm at keyshare.id/products/puck. Regulatory certification status as of Feb 2026; confirm before procurement. Warranty per KeyShare Hardware Warranty Agreement. KeyShare, Puck: trademarks of KeyShare, Inc. Apple, Apple Wallet, Apple VAS: trademarks of Apple Inc. Google, Google Wallet, Google Smart Tap: trademarks of Google LLC. © 2026 KeyShare, Inc. All rights reserved. Protected by US Patents.