FACEKEY CORPORATION

FaceKey PRO3 · Communications overview

One reader. Every building it will ever meet.

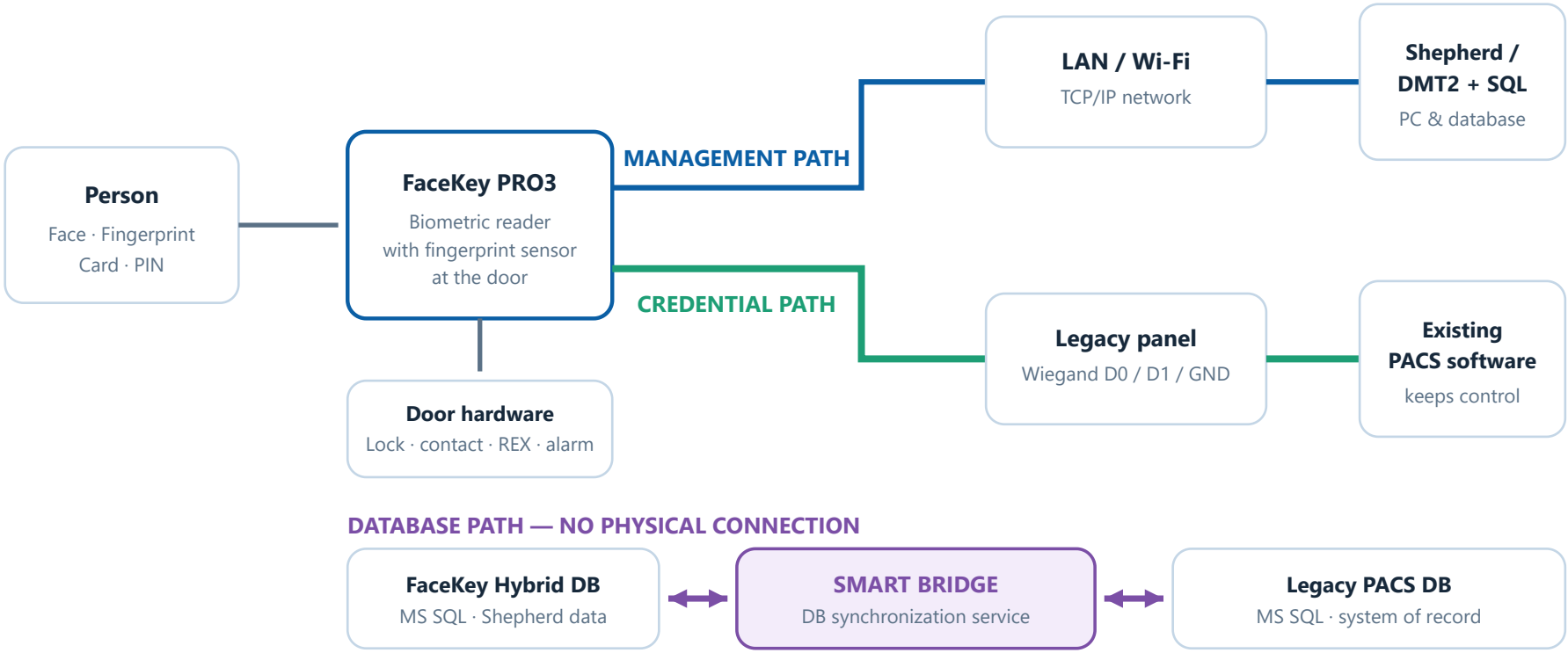
The PRO3 reads a face, a fingerprint, a card or a PIN. It can run the door itself and talk to FaceKey software over your IP network; it can speak Wiegand to a legacy panel; or — with **Smart Bridge** — the FaceKey and legacy systems can meet inside their databases, with no physical connection at all.



One reader, three ways to win the job

New building, a building that already runs on cards, or a customer who will not touch their existing system at all — the PRO3 fits all three, so the conversation never ends at "we already have a system." A person presents a face, a fingerprint, a card, or a PIN; what happens next depends on the scenario. Pick one — the matching path lights up.

All three paths | Native FaceKey system | Hybrid — legacy panel stays | Smart Bridge — database sync



Three independent paths: blue — reader management over the IP network; green — the credential over Wiegand to a legacy panel; purple — the two systems' databases synchronized by Smart Bridge, with no physical connection between the systems at all. A PRO3 installation can use any one of them, or combine them.

Five ways to connect one reader

Same reader, same door hardware — the difference is how data and power get to it, and how deeply it integrates with what is already there.

1 Wired Ethernet + 12 VDC

2 PoE switch + splitter

3 Wi-Fi + local power

RJ45 TCP/IP to the LAN switch, plus a separate local 12 VDC regulated supply.

Best when: a reliable wired LAN and a suitable power source are available at the door.

One network cable carries power + data to a splitter at the reader, which separates RJ45 data and regulated 12 VDC output.

Watch out: the PRO3 is *not* fed PoE directly — the splitter makes the 12 VDC. The illustrated splitter delivers about 1.17 A at 12 VDC; verify the full power budget (reader, lock inrush, REX, cable losses) before installation.

The PRO3 is Wi-Fi capable, so the data link is wireless. (Other FaceKey products need a Wi-Fi repeater.)

Watch out: Wi-Fi replaces the data cable only — local 12 VDC power is still required. Validate coverage, roaming, network segmentation and offline behaviour at the site.

4 Hybrid — legacy panel

The PRO3 wires to the existing access control panel as a reader: Wiegand WD0 / WD1, signal ground, and 12 VDC (if compatible).

Best when: the building keeps its card-based system. The panel keeps its door-control logic; the PRO3 adds face and fingerprint recognition at the door. This link is Wiegand — **not Ethernet to the PACS**.

5 Smart Bridge — database sync

No cable between the systems at all. A synchronization service keeps the FaceKey Hybrid database and the legacy system's database — usually MS SQL on both sides — in step, in both directions.

Best when: the customer keeps their conventional card system exactly as it is. Enroll once, in either system, and both know; any enrollment or event recorded in one system is synchronized to the other.

In every case the door is **reader-centric**: in a native installation the PRO3 itself interfaces with the lock, door contact, exit device and alarm — and the PRO3 also has an intercom capability, which requires an additional

device.

Smart Bridge — the systems meet in the database

The third way needs no reader-to-panel wiring at all. The DB Bridge / Synchronization Service connects the legacy PACS database (the system of record) with the FaceKey reader platform database and keeps the two consistent — in real time or near real time.

What flows across

- ✓ User / employee enrollment
- ✓ Credentials & access rights — cards, PINs, biometrics; doors, zones, permissions
- ✓ Schedules — time zones and holidays
- ✓ Access events & door-open events
- ✓ Personnel updates and audit logs

How it stays consistent

- ✓ Bi-directional synchronization over secure data streams
- ✓ Real-time, scheduled, event-driven, or on-demand sync
- ✓ Data mapping & transformation between the two schemas
- ✓ Conflict detection & resolution, transaction logging, rollback & recovery
- ✓ Unified reporting — the conventional software can report on both systems' events

Why it wins deals

- ✓ No physical connection to install — the databases do the talking
- ✓ The legacy PACS stays the system of record; the customer's investment is preserved
- ✓ Phased, low-risk migration instead of a forklift replacement
- ✓ Millions of conventional card systems are installed — every one of them is a candidate

What plugs in at the door

Six connections, in plain words. (In a hybrid installation, the legacy panel — not the reader — keeps these door functions.)

Door lock / relay

Electric strike or maglock, driven through the reader's relay. This is the wire that actually opens the door.

Door contact (sensor)

A NO/NC dry contact that reports whether the door is open or closed — and raises an alarm if it stays open too long.

Request to exit (REX)

An exit button or a powered motion detector on the inside, wired so people can leave without a credential.

Alarm output

A two-wire signal (SIG + GND) to the alarm panel or an alarm bell when something is wrong at the door.

Doorbell output

Lets the reader ring a bell at the door — a visitor announces themselves instead of presenting a credential.

Aux input / Wiegand in-out

An auxiliary input that can trigger open/alarm, plus Wiegand in and out for reader-level integration.

Two rules that prevent most mistakes

Rule 1 — Network is not power

Every PRO3 needs its own 12 VDC supply, on Ethernet and on Wi-Fi alike. Ethernet doesn't power the reader unless a PoE splitter converts it at the door, and the internet is optional — the system runs on the local network; internet access depends on the site design.

Rule 2 — Wiegand is not Ethernet, and neither is a database

The three paths do three different jobs: TCP/IP manages the reader, Wiegand carries the credential to a legacy panel, and Smart Bridge synchronizes the two systems' databases. Wiegand wiring alone does not create database synchronization — that is what Smart Bridge is for.

Before you install — six quick checks

1 Network
RJ45 LAN or Wi-Fi? IP addressing, VLAN, firewall and management connectivity confirmed?

2 Power
12 VDC supply sizing, PoE splitter rating, lock inrush, voltage drop and backup.

3 Door wiring
Lock type and fail mode, relay contacts, door contact, REX, alarm output.

4 Hybrid PACS
Wiegand format, D0/D1/GND, reader power compatibility, panel enrollment.

5 Life safety
Emergency egress, fire-alarm interface, local code and AHJ requirements.

6 Integration
Shepherd / DMT2, SQL server placement, Smart Bridge database synchronization validation.

Conceptual overview — not terminal-level installation instructions. Distilled from *FKFP-PRO3 Basic Wiring* (1-22-2026), *PRO3 Communications Detailed v4*, *FaceKey DB Bridging Service* (6-24-2026), and the *DB Synchronization Architecture* (Figure 5, 7-28-2026). Field verification is required before installation.

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