Distributed Edge Access Control

Complete wiring guidelines for deploying the **Identry 6 Reader** with the **EntryCore Controller** in enterprise environments.

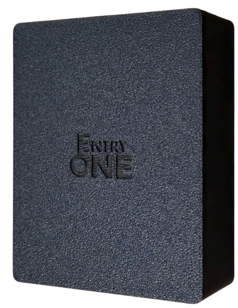
- **Deterministic Unlock:** Dedicated mechanical relays isolate the opening from network latency.
- **Flexible Topology:** Reader-to-controller link options support 4-wire, 6-wire, Cat5e/Cat6, and a 2-wire fallback.
- **Retrofit Ready:** Seamlessly integrate into legacy systems via isolated optical handoffs.
- **Elevator Integration:** Bypass expensive API fees using spare traveling cable conductors and our 40-Relay board.

POE / LAN

LOCAL 24V DC

OVERLAY RETROFIT

ELEVATOR CONTROL



Proprietary Link Options

4-Wire Minimum

Red: LINK PW+
Blk: LINK PW-
Grn: TOKEN A
Wht: TOKEN B

6-Wire Recommended

Yel: BOOST PW+
Blu: BOOST PW-

Ideal for longer runs

Cat5e / Cat6

Org Pair: LINK PW±
Grn Pair: TOKEN A / B
Blu/Brn: BOOST PW±

2-Wire Fallback Mode

- Uses internal reader relay.
- Repurpose TOKEN A & B inside backplate to COM/NO.

Internal 2-Wire Conversion Note

For severe retrofits where only 2 conductors are viable, the Identry 6 can operate in a fallback mode. Remove the back plate and re-land the **TOKEN A** and **TOKEN B** wires to the internal **COM** and **NO/NC** relay terminals. This converts those two wires into a local lock circuit, leaving only **LINK PW+** and **LINK PW-** to carry power and multiplexed data back to the EntryCore.

Controller Connectivity

READER PORT	LINK PW+, LINK PW-, TOKEN A, TOKEN B, BOOST PW+, BOOST PW-
LOCK RELAY	COM / NO / NC (Max 300mA @ 24V if sharing POE power)
LOCAL INPUTS	REX, DPS, ALM
DATA UPLINK	RJ45 PoE/LAN or dedicated 485
POWER IN	12VDC / 24VDC local terminal OR standard PoE

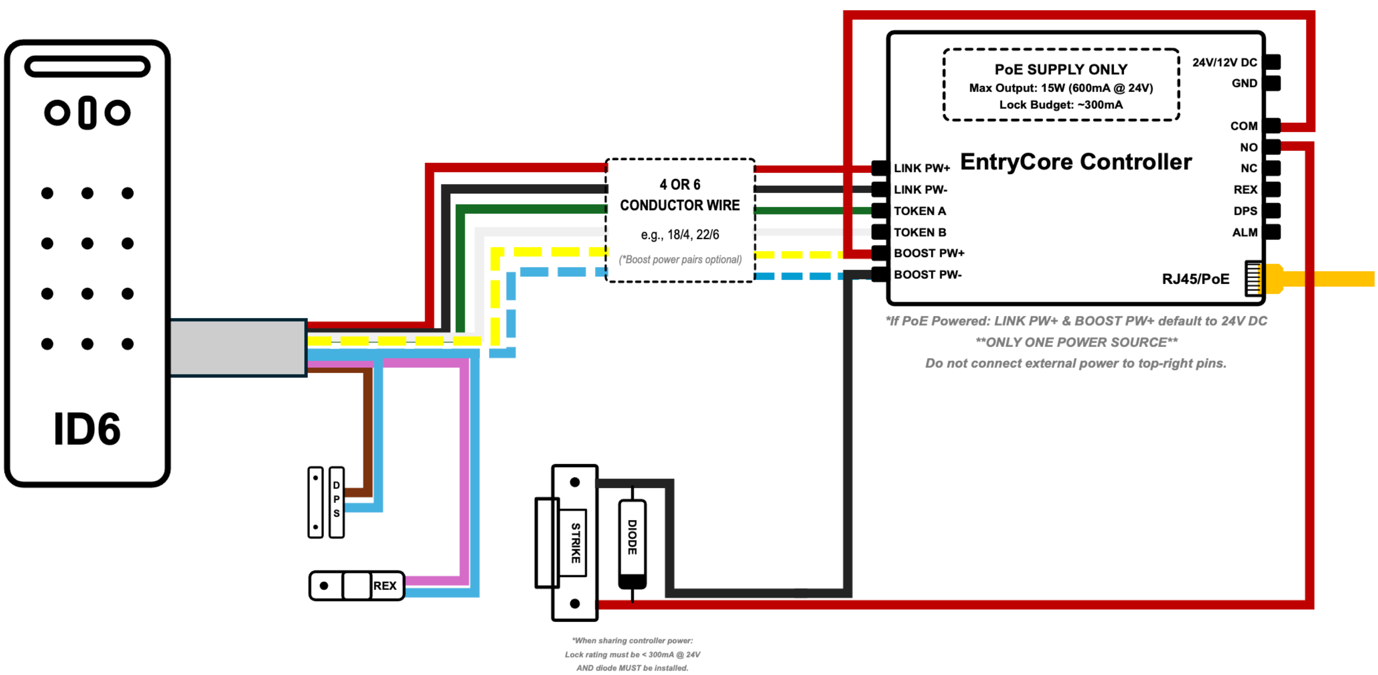
Pre-Installation Checklist

- Verify lock operating voltage and fail-safe/fail-secure logic.
- Measure existing conductor gauge and total run distance.
- Ensure inline flyback diodes are installed at the strike/maglock.
- Confirm power budget (Max 15W output if relying entirely on PoE).

Important: Do not double-feed power. If utilizing PoE to power the EntryCore, do NOT connect an external power supply to the top-right DC terminals.

PoE / LAN Powered Controller

Standard opening utilizing a single network drop to power the controller, reader, and lock.



PRIMARY USE CASE

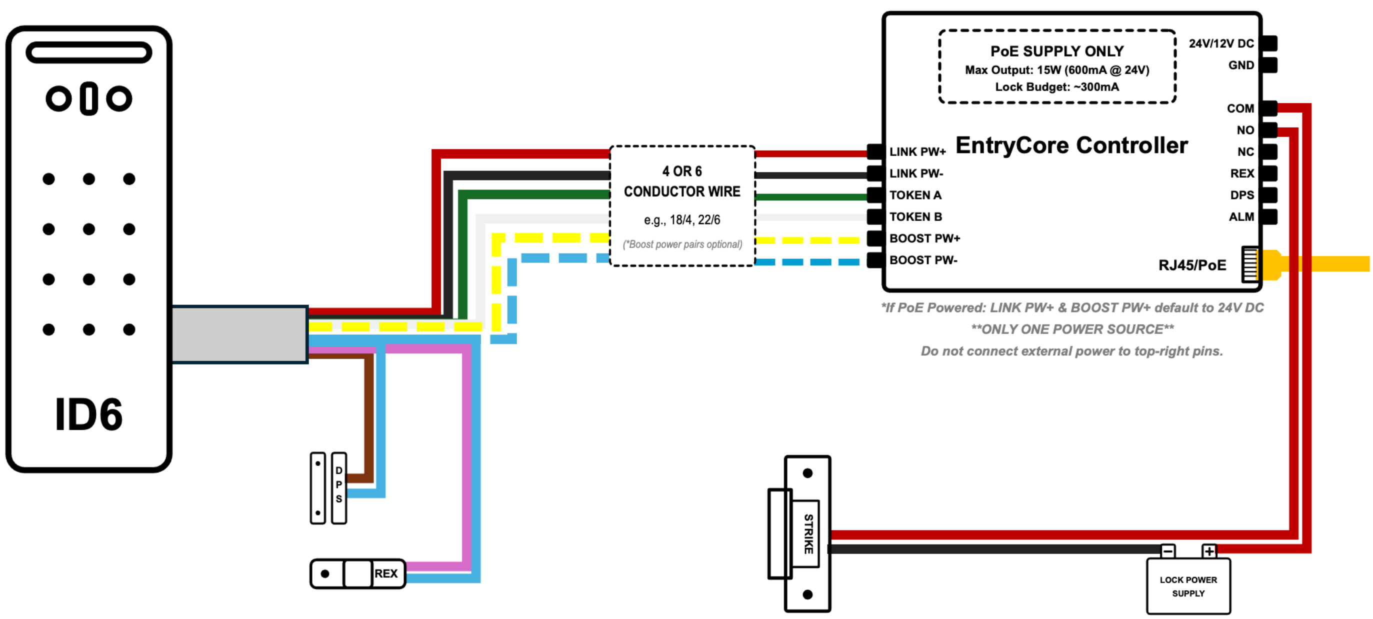
New construction or IT-heavy environments where pulling a single Cat5e/Cat6 network drop to the door controller is the most efficient power and data path.

ENGINEERING CONSTRAINT

When running purely on PoE, the EntryCore max output is 15W. This leaves a lock budget of approximately 300mA. Highly active locks may require external power.

PoE Controller with Local Lock Power

PoE provides network and controller power, while a separate supply drives high-draw locking hardware.



PRIMARY USE CASE

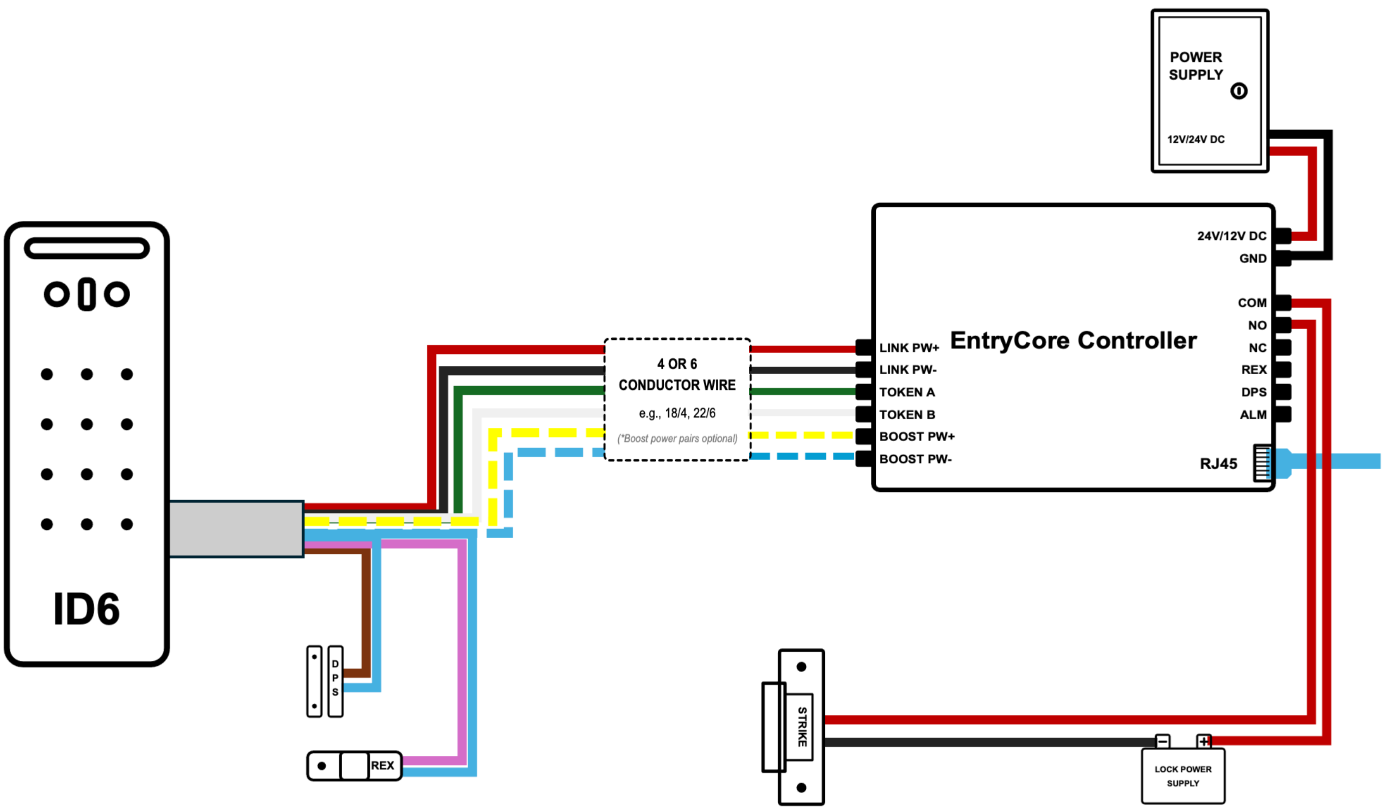
Openings that have network access for data and controller power, but feature heavy-draw locking hardware (like maglocks or motorized crash bars) that exceed the standard 15W PoE budget.

PHYSICAL ISOLATION

Because the EntryCore uses physical dry-contact relays (COM/NO/NC), the heavy current from the external lock power supply is fully isolated from the controller's sensitive PoE circuitry.

Local DC Power Supply

Utilizing a centralized 12V/24V power supply for the entire opening.



PRIMARY USE CASE

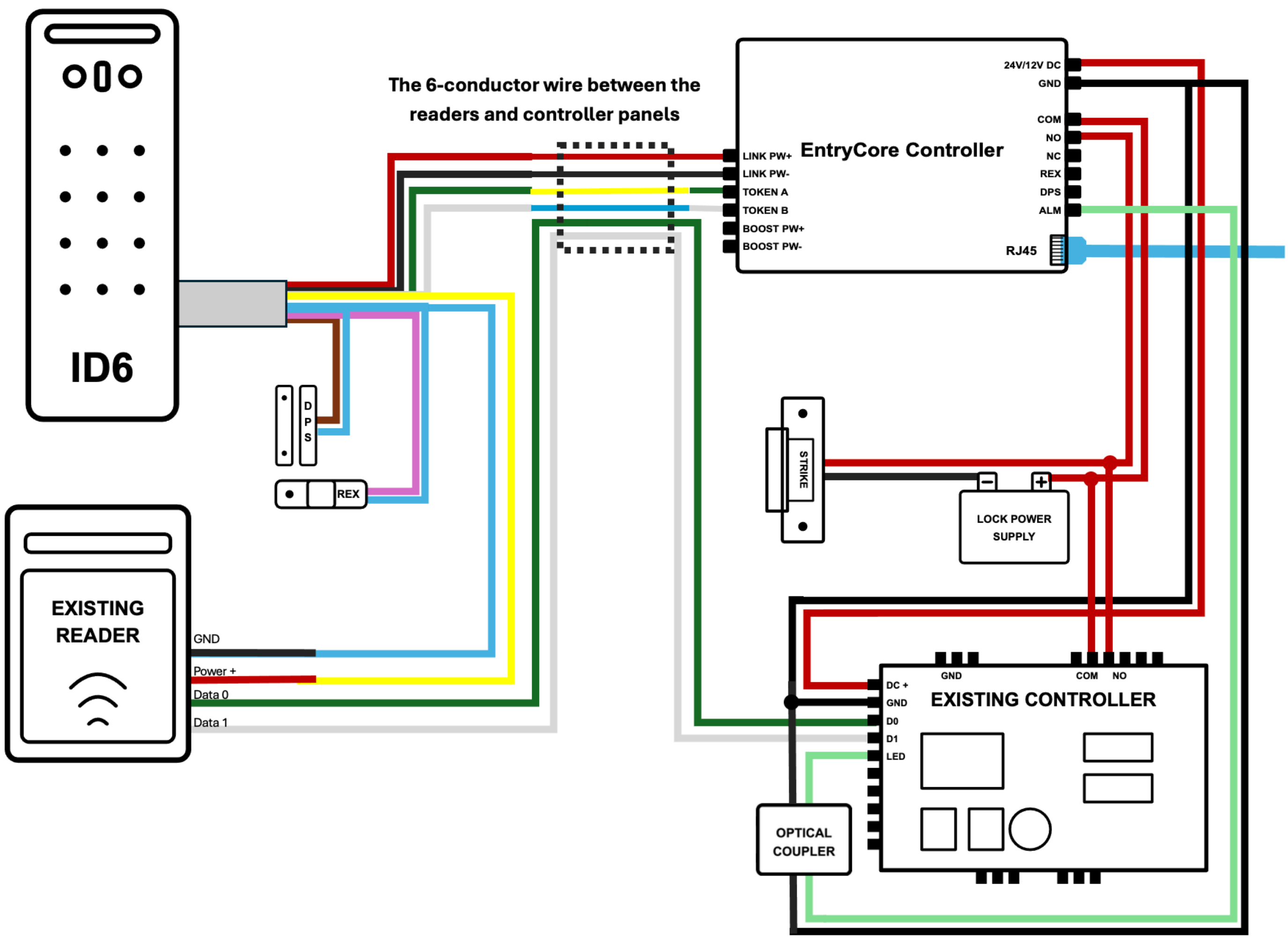
Retrofits where heavy access control power supplies (Altronix/LifeSafety) are already on the wall, or classic hardwired integrations.

DATA UPLINK

In this configuration, the RJ45 port is utilized purely for LAN data communication. Power is derived entirely from the top-right DC terminals.

Isolated Overlay Retrofit

Integrating EntryOne alongside legacy systems (e.g., Lenel, Brivo, HID) without disruption.



PRIMARY USE CASE

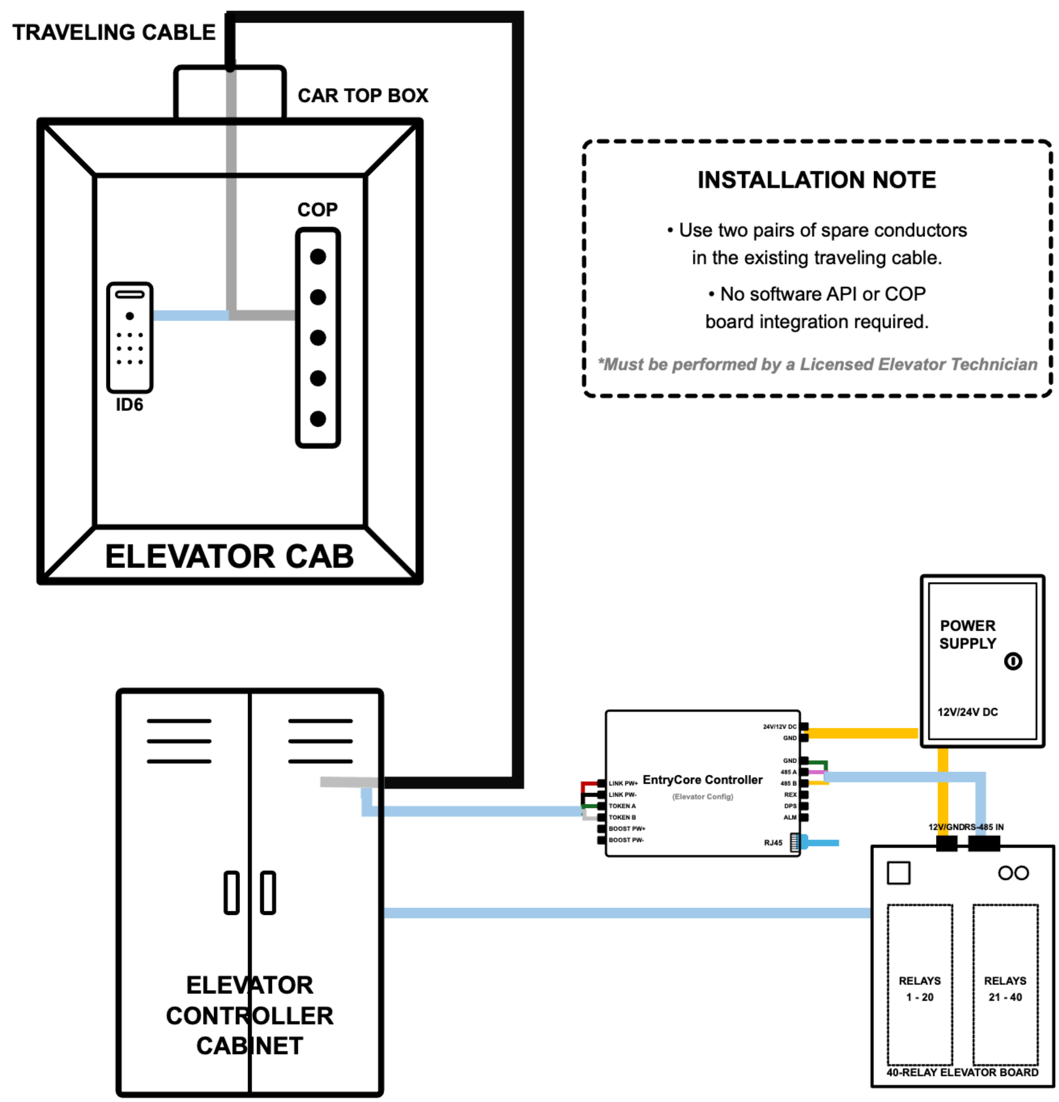
Enterprise migrations where the client wishes to run the new EntryOne architecture in parallel with their existing head-end panels before a hard cutover.

OPTICAL ISOLATION

The ALM / dry-contact path handles the isolated handoff between the EntryCore and the legacy controller's REX/input circuit, preventing ground loops.

Elevator Floor Control Handoff

Bypassing costly API fees using spare traveling cable conductors.



PRIMARY USE CASE

Securing multi-floor access. The Identry 6 mounts inside the cab, pushing data up the traveling cable to the machine room for physical relay switching.

REGULATORY COMPLIANCE

This physical dry-contact approach requires zero interaction with the COP software logic. Must be performed in coordination with a Licensed Elevator Technician.

Commissioning Workflow

1. Mount the Identry 6 and EntryCore in their final physical locations.
2. Terminate the selected reader link (4/6 wire, or internal 2-wire) and land the relay, DPS, REX, and ALM conductors.
3. Install the flyback diode across the lock terminals.
4. Apply PoE/LAN or local DC according to the specific scenario design.
5. Launch the EntryOne cloud portal to complete device pairing and opening assignment.
6. Physically verify online status, credential response, mechanical relay action, and door state (DPS).
7. Document the final conductor color mapping and IP assignment before client turnover.

Quick Troubleshooting

- **No Reader Power:** Verify selected input voltage and check for inverted LINK PW polarity.
- **Intermittent Data on Long Runs:** Upgrade from 4-wire to 6-wire, or utilize Cat5e / Cat6 doubled pairs to combat voltage drop.
- **No Unlock Action:** Listen for the mechanical click of the relay. If it clicks but the door remains locked, verify the external lock power supply circuit.
- **No DPS/REX Event:** Confirm conductors are landed on the correct inputs. Ensure NO/NC settings match the hardware.
- **Controller Overheating:** Ensure only ONE power source is connected (PoE vs. DC Terminal).

Final code compliance, egress configuration, fire-alarm interface, and hardware selection remain the responsibility of the licensed system designer and installer.