Connect Allegion wireless locks to the Kisi Controller

Power the Allegion gateway and connect it to the RS-485 interface of the Kisi Controller Pro. The gateway then talks to the Schlage wireless locks over Bluetooth Low Energy.

Supported hardware

Type	Model
Wireless locks	Schlage NDE Networked Wireless Lock Schlage LE Mobile Enabled Wireless Mortise Lock
Gateways	Allegion ENGAGE Gateway (GWE) Allegion ENGAGE Gateway 2 (GWE2)
Kisi controllers	Kisi Controller Pro 1.1 Kisi Controller Pro 2.0

Supported doors

One wireless lock per door

Each Kisi Controller Pro connects to a single Allegion gateway. The number of wireless locks the controller manages depends on the gateway.

Gateway	Wireless locks (doors) per controller
ENGAGE Gateway (GWE)	Up to 10
ENGAGE Gateway 2 (GWE2)	Up to 5

These doors are in addition to the four Kisi Reader Pro doors the controller manages on its own.

NOTE

Allegion has discontinued the GWE. The GWE2 is its direct physical and functional replacement and is backwards compatible with the RS-485 connection to the Kisi Controller.

Before you start

This guide assumes the Schlage locks and the Kisi Controller Pro are already installed. If they are not, follow these guides first:

Kisi installation: docs.kisi.io

Schlage NDE or LE installation manual, from Allegion

Allegion gateway installation instructions, from Allegion

You need

One Allegion gateway, GWE or GWE2

Three-wire cable for RS-485 (A, B, GND)

A power source for the gateway. See Power, page 2.

> **⚠ WARNING** Disconnect power from the Kisi Controller and the gateway before you wire them. Power them up only after all connections are made.

Connect the gateway to the controller

2-wire RS-485

ENGAGE Gateway (GWE)

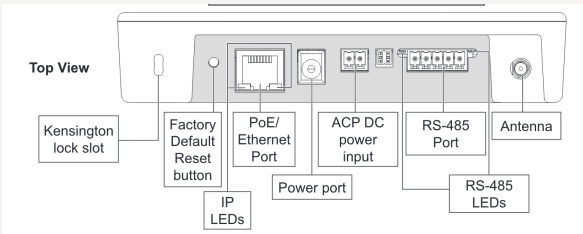
GWE terminal	Kisi Controller RS-485 terminal
Tx–	A
Rx+	B
GND	GND

Leave Tx+ and Rx– unconnected.

ENGAGE Gateway 2 (GWE2)

GWE2 terminal	Kisi Controller RS-485 terminal
TDA–	A
RDB+	B
GND	GND

1. Disconnect power from the Kisi Controller and the gateway.
2. Set the gateway to 2-wire RS-485: install both of its 2|4-wire jumpers.
3. Connect the controller's A terminal to the gateway's Tx– (GWE) or TDA– (GWE2) terminal.
4. Connect the controller's B terminal to the gateway's Rx+ (GWE) or RDB+ (GWE2) terminal.
5. Connect the controller's GND terminal to the gateway's GND terminal.
6. Power up the gateway and the controller.
   See Power, below.



Gateway terminals, top view. Shown: GWE.

Power

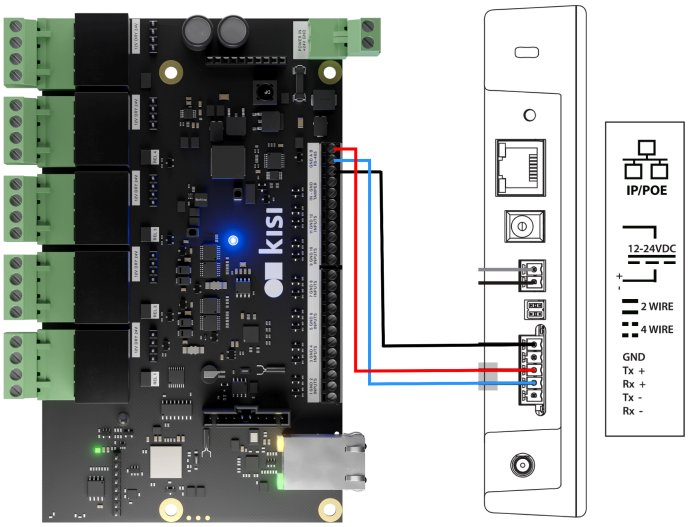
Use one power source at a time

Source	GWE	GWE2	Connection
Supplied 24 V power adapter	Recommended	Not supplied	Plug the adapter into a wall socket and the power cord into the gateway's power port.
Power over Ethernet (PoE)	Yes	Yes	Plug a Cat5e cable from a PoE-powered Ethernet connection into the gateway's PoE/Ethernet port.
DC power input	Yes	Yes	GWE: 12 V DC at 330 mA or more, or 24 V DC at 100 mA or more; positive to +, ground to –. GWE2: 2-wire DC, as described in Allegion's GWE2 installation instructions.

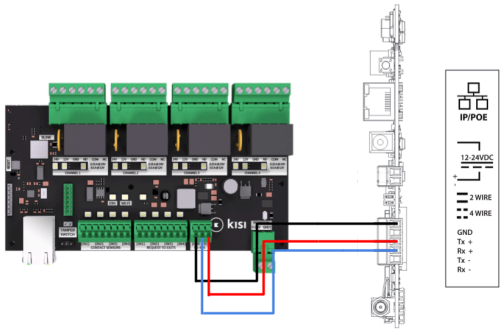
Once connected, each wireless lock appears as an input of the Kisi Controller in the Kisi Dashboard. Assign each one to a door there.

Wiring diagrams

Shown: GWE



Kisi Controller Pro 2.0 to GWE. On a GWE2, use TDA– for A and RDB+ for B.



Kisi Controller Pro 1.1 to GWE. On a GWE2, use TDA– for A and RDB+ for B.

Gateway location

Bluetooth Low Energy, 2.4 GHz

The gateway talks to the locks over Bluetooth. Walls, distance, metal objects and other barriers weaken the signal.

Place the gateway within 9 m (30 ft) line of sight of the doors.

Mount the gateway and the locks on the same floor.

Orient the gateway antenna vertically.

Keep at least 25 mm (1 in) from any metal in all directions.

Run a site survey to test the connection strength. If the signal is weak, move the gateway closer to the locks.

⚠ CAUTION

Do not install the gateway outdoors, in a metal box or on a metal surface. Signals do not pass through metal walls or metal mesh in walls (stucco).

NOTE

Wi-Fi access points, metal shelving and cabinets, HVAC equipment, elevators, cellular repeaters and microwave ovens can cause interference and reduce range.