Spider

LTE / Wi-Fi / Bluetooth control unit

The Spider is an IoT control unit for gates, doors and lighting systems and any other equipment that benefits from remote control and management. It connects over a cellular network (4G LTE), 2.4 GHz Wi-Fi and Bluetooth, and controls the connected equipment through its onboard dry-contact relays. Management is through the PalGate App or through an easy-to-use PAL Web Portal.



12 VDC
Supply, 1 A

4G VoLTE
Cellular voice

1 – 2
Relay outputs

53 × 80 × 25
2.09 × 3.15 × 0.98 in
Dimensions

–20…+70 °C
–4…+158 °F
Operating temperature

CE FC
Certification

ELECTRICAL

Supply voltage	**12 VDC, 1 A (stable supply)**
Average standby current	**~70 mA**
Relay outputs	**1 or 2 (model-dependent), dry contact, N.O./N.C.**
Relay contact rating (resistive)	**1 A at 30 VDC; 0.5 A at 125 VAC**
Relay activation time	**Programmable (default 2 s)**
Inputs	**1 or 2 (model-dependent), N.O./N.C.**

MECHANICAL & ENVIRONMENTAL

Dimensions	**53 × 80 × 25 mm (2.09 × 3.15 × 0.98 in)**
Net weight	**83 g / 2.93 oz (Spider-50, Spider-i, Spider-B); 87 g / 3.07 oz (other models)**
Operating temperature	**–20 °C to +70 °C (–4 °F to +158 °F)**
Installation	**Inside a waterproof, dustproof enclosure**
Certification	CE FC **FCC ID: 2AUD3-SPIDER**

CONNECTIVITY

Cellular 4G (LTE), Europe (SP3XX)	**B1, B3, B7, B8, B20, B28**
Cellular 2G, Europe (SP3XX)	**B3, B8**
Cellular 4G (LTE), USA (SP1XX)	**B2, B4, B12, B66**
Voice	**VoLTE**
Wi-Fi	**2.4 GHz, all models**
Bluetooth	**Bluetooth® 5 (LE)**
Remote receiver	**433 MHz**
Wiegand	**Wiegand 26 (D0, D1, GND)**
Antenna connector	**SMA, 50 Ω**

INDICATORS

SIM / network LED	**Boot, network search, SIM status**
Signal LEDs	**3 LEDs: signal strength; LED 1 also shows connection status**

MODELS

MODEL	RELAY OUTPUT	INPUTS	APP USERS	433 MHZ REMOTES	WIEGAND 26
 **Spider-50** SP300 / SP100	1	1	50	—	—
 **Spider-i** SP301 / SP101	1	1	Unlimited	—	—
 **Spider-B** SP302 / SP102	2	2	Unlimited	—	—
 **Spider i-WRL** SP310 / SP110	1	1	3	4,000	—
 **Spider i-WR** SP311 / SP111	1	1	Unlimited	4,000	—
 **Spider B-WR** SP312 / SP112	2	2	Unlimited	4,000	—
 **Spider-Wiegand 26** SP313 / SP113	1	2	Unlimited	4,000	✓

Part numbers shown under each model: Europe (SP3XX) / USA (SP1XX). Order the version for the installation region.

TERMINALS

MODEL	RELAY OUTPUT	INPUTS	OTHER
Spider-50, Spider-i	N.O.1 · COM 1 · N.C.1	INPUT 1 · GND	± 12 VDC
Spider i-WRL, Spider i-WR	N.O.1 · COM 1 · N.C.1	INPUT 1 · GND	± 12 VDC 433 MHz receiver
Spider-B	N.O.1 · COM 1 · N.C.1 N.O.2 · COM 2 · N.C.2	INPUT 1 · GND INPUT 2 · GND	± 12 VDC
Spider B-WR	N.O.1 · COM 1 · N.C.1 N.O.2 · COM 2 · N.C.2	INPUT 1 · GND INPUT 2 · GND	± 12 VDC 433 MHz receiver
Spider-Wiegand 26	N.O.1 · COM 1 · N.C.1	INPUT 1 · GND INPUT 2 · GND	± 12 VDC D0 · D1 · GND – Wiegand 433 MHz receiver

MANAGEMENT

- PalGate App (iOS and Android)
- PAL Web Portal (optional; additional charges may apply)
- Real-time email and push notifications
- Scheduling: timers, events, calendar, holidays, astronomical clock
- Per-user access schedules and “Nearby Only” feature: Allows you to restrict gate access to users who are within a configurable distance of the gate
- User import and export with Excel files
- Door/gate status notifications through an input and magnetic sensor

OPENING METHODS

PalGate App	**Phone call**
Proximity & automatic	**Siri**
Google Assistant	**Smart watches (Apple and Google)**
Apple CarPlay	**Android Auto**
Bluetooth (nearby)	**433 MHz remote (WR)**

CE FC Specifications are subject to change without notice.