



# Digiseal Solid-State Module 12V

Direct-power BLE access control — no relay, no complexity



The Digiseal Solid-State Module 12V delivers power directly through the module to connected electric locks, gates, and appliances — without a mechanical relay. It pairs instantly via Bluetooth with the Digiseal mobile app, works fully offline, and connects to the optional NB-IoT Gateway for remote management. Designed for embedding into any manufacturer's lock or gate hardware, it keeps installations simple and entirely card-free.

## Technical Specifications

<b>PCB Dimensions</b>	18.5 × 28.0 mm
<b>Power Supply</b>	12 VDC
<b>Pass-Through Current</b>	Max 3 A continuous at 12 VDC (N-MOSFET; derated for ambient temperature) <b>⚠ Install flyback diode (e.g. 1N4007) across solenoid coil — cathode to + terminal — to prevent transistor damage</b>
<b>Connectivity</b>	Bluetooth 5.0 (BLE); optional NB-IoT Gateway for remote access
<b>Connectors</b>	LOCK, VOUT, VIN, GND (screw terminal block)
<b>Encryption</b>	ECC secp256r1 hardware-bound keys; AES-256 CBC communication
<b>Casing / IP Rating</b>	Determined by customer-selected enclosure; IP65, IP67, IP68 and explosion-proof options available
<b>Operating Temp.</b>	-40 °C to +85 °C
<b>Electrical Consumption</b>	Sleep ~15 µA; BLE standby ~0.5 mA; active switching ~10–12 mA (at 12 V)
<b>Certifications</b>	Available on request; additional certifications at customer cost

## Key Features

- No relay — direct solid-state power switching
- Generates unique private key on first boot; never exported
- BLE offline access — zero internet required for core operation
- Remote management via optional NB-IoT Gateway
- Compatible with any electric lock or gate from any manufacturer
- White-label app available (iOS & Android)
- API-first cloud integration (REST + MQTT)

## Applications

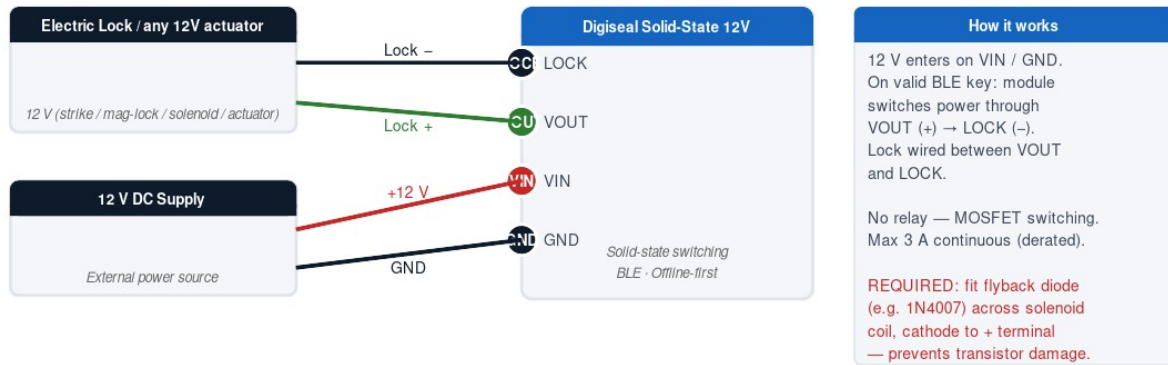
- Electric strike locks & magnetic locks
- Automated gates and barriers
- Garage doors and roller shutters
- Industrial machinery access points
- Smart building access panels



## Connection Diagram

### Digiseal Solid-State Module 12V — Connection Diagram

Direct solid-state 12 V switching · Terminals: LOCK · VOUT · VIN · GND



**Legend**      — +12 V input      — GND / Lock return      — Switched output → lock