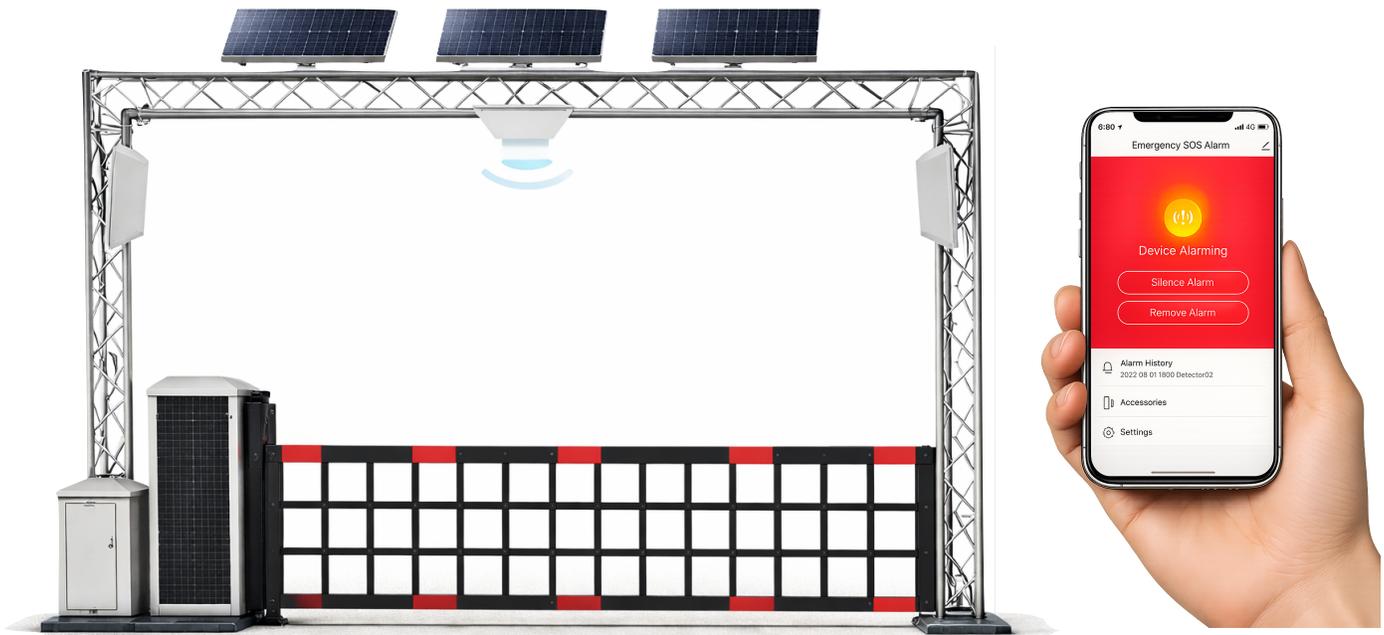


Solar-Powered Heavy-Duty Boom Barrier Gate System with RFID Access Control and Anti-Theft Tracking

Model: F-GPA-DZ309

System Overview

The F-GPA-DZ309 is a **heavy-duty autonomous** solar-powered barrier gate system developed for construction sites, industrial yards, infrastructure projects, remote entrances, and other **off-grid** access points. This complete system combines heavy-duty boom barrier control, long-range RFID vehicle identification, anti-theft asset monitoring, solar-powered operation, and **wireless 4G** alarm notification.



Barrier Gate Specifications

Model	F-GPA-DZ309
Type	Solar-Powered Heavy-Duty Boom Barrier Gate
Housing Dimensions	27.2" W × 16.9" D × 50.4" H
Operating Voltage	DC 24V / DC 12V
Motor Type	180W DC Brushless Motor
Opening / Closing Time	6–9 seconds
Anti-Crush Protection	Automatic boom rebound upon obstacle detection
Lightning Protection	Included
Boom Type	Straight Boom Arm
Maximum Recommended Boom Length	up to 16.4 ft

Solar Power System for Barrier Gate

Dual-sided photovoltaic solar panel system

Top cover solar panel configuration 90W + 200W / 300W

Solar mounting pole height 9.8 ft

Battery Type LiFePO4

Battery Capacity 500Ah

Power Management Integrated photovoltaic control, drive control, and battery cycle power conversion

Protection Features Overcharge and over-discharge protection

Performance Up to 6,000 lifting cycles during extended rainy or low-sunlight conditions

Emergency backup battery replacement available

RFID Vehicle Access Control System

Included in this system:

- 2 × F-930 Long-Range RFID Readers
- One reader for entry
- One reader for exit
- Read range: up to 50 ft
- Dry contact relay output for barrier trigger

Each RFID reader includes:

- Dedicated solar power system
- 9V / 3A power output
- Backup battery included

RFID Tags Included

Included in this system:

- 100 × Heavy-Duty UHF Anti-Metal RFID Tags (stickers and rivets)
- Recommended for construction sites and harsh outdoor conditions

Anti-Metal Tag Specifications

Size	5.31" × 0.87" × 0.47"
Material	ABS
Operating Temperature	-22°F to +185°F
Waterproof Rating	IP65

Alternative RFID Credential Options

Other RFID credentials are also available, including:

- Windshield sticker tags
- PVC cards with windshield suction cup card holders
- Key fob tags
- Standard RFID PVC cards

Anti-Theft Tracking System

Included in this system:

- 1 × F-930 Anti-Theft / Tracking System
- Equipped with strobe light and 110 dB alarm
- Detects unauthorized attempts to pass through the access point with tagged items, assets, or equipment
- Suitable for monitoring protected assets under the road truss structure
- Can block the exit when an alarm is triggered
- Anti-theft response takes precedence over access control when required

Power for anti-theft system:

- Dedicated solar panel
- 9V / 3A power output
- Backup battery included

Wireless 4G GSM Alarm Notification System

Included in this system:

- Wireless GSM / 4G alarm notification unit
- Sends alerts to up to 5 mobile phone numbers simultaneously
- Notifies users of any unauthorized attempt to pass through the access point with a tagged asset or item
- Can be used for real-time remote alert notification

Included Structural Components

Outdoor Electrical Box	
Quantity	1 pc
Size	12" × 12" × 8"
Road Truss for Devices	
Quantity	1 pc
Width	20 ft
Height	14 ft
Construction	Square metal structure
Main Pipe Size	8" × 8" square pipe
Secondary Pipe Size	1"
Load Capacity	400 lb
Weight	170 lb

Features:

Quick and easy setup
Adjustable and extendable height and width

Standard Included Components

- 1 × F-GPA-DZ309 Solar Barrier Gate
- 1 × Boom Barrier Arm
- 2 × Wireless encrypted long-range remote controls
- 1 × Battery box set
- 2 × Solar panels for barrier gate
- 2 × F-930 RFID Readers for entry and exit
- 2 × Solar power kits for RFID readers with backup batteries
- 100 × Heavy-Duty UHF Anti-Metal RFID Tags (stickers and rivets)
- 1 × F-930 Anti-Theft / Tracking System with strobe light and 110 dB alarm
- 1 × Solar power kit for anti-theft system with backup battery
- 1 × Wireless GSM / 4G alarm notification system
- 1 × Outdoor electrical box
- 1 × Road truss structure
- 1 × F-02 RFID Tag Writer / Encoder (USB)

Event logs and full access control software system optional