

# ELECTRONIC SHACKLE SYSTEM



FSJ100

## I Application Scenarios

- Residence
- Electronic Fence
- Forbidden Places / Protected Places
- Public Places
- Remind protected personnel

## I Functions



## I Features

### 01 Multiple Anti-damage Technology

The wristband has a tensile strength of 1000 Newtons. Any cuts, or violent disassembly will be alarmed.

### 02 Reliable Dual Communication Mode

LoRa communication is applied in this system which has strong penetration capacity and low power consumption.

### 03 Multiple Means of Tracking Prisoners

The electronic shackles provide three monitoring modes: power-saving mode, normal mode and tracking mode.

### 04 High Reliability of Alarm

1. Electronic shackles wristband was integrated designed to eliminate false alarm.
2. Strict IP67 protection level.
3. Multiple positioning methods to improve positioning accuracy.

### 05 Long Battery Life

Low power consumption design.

### 06 Providing More Reliable Protection to Victims

The victim can be equipped with a reminder to alert approaching prisoner.

## I Specifications

### Electronic Shackling

1. Support GPS/GLONASS dual-mode positioning, combined with WiFi/LBS integrated positioning mode to achieve accurate positioning of shackles, greatly reducing fence false alarm.
2. 4G solution, compatible with 2G/3G; GSM module supports 4 bands: 850/900/1800/1900 MHz.
3. Timely alarm for shearing and disassembly, integrated wristband design to eliminate false alarm for disassembly of wristband, and high tensile strength of wristband.
4. Dustproof and waterproof level IP67.
5. Internal battery life: 24 hours (60s update frequency), 7 days (1 hour update frequency).
6. Four LED lights support power status, GPS status, GSM status and LoRa status indication.
7. Support call and monitoring functions.
8. Support motion sensors.
9. Support three monitoring modes: power saving mode, normal mode and tracking mode.
10. Support remote OTA upgrade, easy to achieve upgrade of shackles modus, base station.
11. Average start-up time: hot start 3s, cold start 35s.

### LoRa Base Station

1. Uplink communication is available in 2/3/4G and WiFi mode for fixed and mobile occasions.
2. LoRa is used for downlink communication to monitor heartbeat information from electronic shackles.
3. GPS positioning and position information can be reported to base station regularly.
4. Record and transfer commands/messages from the c&c center.
5. Support alarm of fixed base station disassembly.
6. Dustproof and waterproof level IP54.