深圳宝兰安防智能科技有限公司
Shenzhen Bolan Security Technology Co.,Ltd
Shenzhen Baolan Security Smart Technology Co.,Ltd

Highway ultra speed boom barrier

BLS-P09H

Features:

· **Ultra-Fast Lifting & Lowering Response**
Completes opening and closing in just 0.3–0.6 seconds (model-adjustable), greatly cutting down vehicle waiting time at busy checkpoints.

· **High-Precision Servo Motor Drive**
Uses brush-less servo or variable-frequency motors for stable, quiet running and precise arm control, with good voltage fluctuation resistance.

· **Multi-Layer Safety Protection**
Equipped with anti-crushing radar, loop detectors and obstacle rebound sensors; automatically stops or reverses to protect vehicles and pedestrians.

· **Intelligent System Integration**
Works seamlessly with LPR, ETC and IoT platforms, supporting remote control, automatic access approval and real-time status monitoring.

· **Rugged Weather-Resistant Build**
Lightweight yet strong aluminum alloy or carbon fiber boom; corrosion-resistant galvanized steel cabinet for outdoor use from -40℃ to +70℃.

· **Adaptive Traffic Flow Control**
Features dynamic speed adjustment, optimizing operation speed based on real-time traffic to balance efficiency and safety.

· **Low Power Consumption**
Ultra-low standby power (<5W) and support for solar power enable energy-efficient and eco-friendly operation.

· **Easy Maintenance & Self-Diagnosis**
Built-in self-detection system identifies and alerts faults such as motor overload or sensor failure, reducing maintenance time and cost.

Solutions:

- Access Control System (ACS)
- CCTV Surveillance System
- License Plate Recognition (LPR) System
- Automatic Barrier Gate System
- Parking Lot Management System
- Perimeter Intrusion Detection System (PIDS)
- Fire Alarm & Emergency Linkage System
- Centralized Security Management Platform
- Remote control, exit button
- Traffic light

Technical Specifications

Parameter	Specification
Body size	338*313*945mm Carbon steel with yellow, black, golden optional
Boom Length	3000mm (customizable for lane width)
Boom Material	Carbon fiber (round , different colors optional)
Opening Speed	0.3-0.6s(savor motor high speed boom barrier, for highway and high traffic flow)
Closing Speed	0.3 - 0.8 s (adjustable to avoid collision)
Driving Mode	Electric motor (planetary servo motor) ; with manual override for emergency
Rated Voltage	AC 110V-240V ± 10% / DC 12V/24V (for small-sized models)
Rated Power	400W - 500W (varies with boom length and model, DC motor: 80W-120W, AC motor 100W-180W, Servo motor 400-500W)
Max Load Capacity	≤ 50kg (boom load; suitable for light-duty vehicle control)
Control System	PLC / Single-chip microcomputer; supports remote control, card swiping & access control, LPR systems etc linkage
IP Rating	IP54 - IP65 (suitable for outdoor use, dust & rain resistant)
Operating Temperature	-20°C to +60°C (adaptable to common outdoor environments)
Safety Device	Infrared photoelectric sensor, ground loop detectors, traffic light optional; auto-reverse when obstacle detected

Core function:

· High-Efficiency Traffic Management

Ultra-fast arm movement (0.3–0.6 seconds) reduces vehicle queuing, ideal for toll plazas and transport hubs.

· Authorized Vehicle Access Control

Verifies vehicles via LPR, ETC or RFID, allowing only approved access and blocking unauthorized entry.

· Multi-Layer Anti-Collision Protection

Radar, ground loops and infrared sensors detect obstacles; arm reverses or stops to protect vehicles and pedestrians.

· Dynamic Traffic Adaptation

Adjusts operation speed based on real- time traffic, balancing peak- hour efficiency and off- peak safety.

· Remote Monitoring & Automation

Supports remote control, real- time status monitoring and IoT- based centralized management.

· Seamless Payment Integration

Connects with toll or parking systems; arm lifts automatically after payment for smoother transactions.

· Emergency Passage Support

Backup power and manual release ensure barrier opens during outages or emergencies for safe evacuation.

· Zoned Access Permissions

Works with access platforms to set different rights for emergency, official and other vehicle types.

Applications:

• Suited for applications requiring high access and mid levels of security

• Used extensively in applications such as highway toll station, plaza, airports or railway stations, university, schools, high-end residential areas, commercial buildings etc all of vehicle access requirements sites

Dimensions: