



1. Product Name
SlideSmart DC™

2. Manufacturer
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3. Product Description

HySecurity® gate operators meet the most stringent governmental, industrial, corporate and residential security and reliability requirements. They are installed at Baghdad International Airport, Fort Knox and The United Nations; at numerous federal, state and municipal sites; at correctional facilities, corporate campuses and power generation facilities; and at mini storages, gated communities and VIP residences.

HySecurity gate operators are fabricated for security, reliability, low maintenance, flexible speed and overall toughness. They are engineered to detect and report critical security breaches and initiate automated, site-specific reports in response to these breaches. Abnormal operation or security breach reporting integrates easily to centralized security monitoring systems through HySecurity's Smart Controllers.

Each gate operator design is tested for at least 200,000 cycles before release to the market. Slide, swing, traffic barrier and vertical lift operators all receive the same rigorous testing.

BASIC USE

Available in standard and solar versions, SlideSmart DC is an electromechanical, chain driven slide gate operator ideal for residential, commercial and light industrial applications. DC battery backup provides continuous operation, even during power failure.

SlideSmart DC is available in a 1 ft/second and a 2 ft/second model. Both models are adjustable speed by 0.25 ft/second to suit site requirements.



SlideSmart DCS 10F (Solar) installed on base riser that houses two extended 50 Ah batteries for high cycle solar operation. 24V DC solar panels charge the batteries for continuous, reliable operation.

SlideSmart DC 15 gracefully handles gates to 40' (12 m) in length and weighing up to 1500 lb (680 kg) at 1 ft/second using Soft Start and Soft Stop technology. SlideSmart DC 10F handles gates up to 40' (12 m) in length and weighing up to 1000 lb (455 kg) at 2 ft/second using Soft Start and Soft Stop technology.

OPERATION

SlideSmart gate opener systems use single phase 115 VAC/230 VAC or solar power. Gates are opened and closed with a brushed DC motor driving a single reduction gear reducer. The gear reducer is filled with synthetic lubricant capable of allowing operation to -13 degrees F (-25 degrees C) without a heater. The output shaft turns a sprocket that drives the gate using #40, nickel-plated roller chain.

When the gate is stopped, the motor applies a brake to the drive assembly, which inhibits any forced manual operation of the gate. Gate position is constantly monitored, allowing automatic reposition if motion is detected without the operator receiving a run command. The uninterruptible power supply enables gate operation in the event of power loss.

COMPOSITION & MATERIALS

Mechanical Components

Constructed of heavy duty, corrosion resistant steel, the SlideSmart DC chassis has a zinc plated finish and an easily removable plate to protect the user from the drive chain. The 2-part operator cover is made of low density polyethylene (LDPE) and consists of a baseplate and fade resistant cover with top locking latch.

Electrical Components

Electronic circuit boards are conformal coated to resist moisture. SlideSmart DC is equipped standard with industrial grade electrical components and overload protection. It is powered by a continuous duty 1/2 HP brushed DC motor with ball bearings, and accepts standard voltages. Components include a 250 VA dual voltage transformer; outside-accessible stop switch; and external photo eye and/or gate edge sensors.

The Smart DC Controller Board has 512K bytes of memory. Features include:

- Inherent entrapment sensor (IES)
- "Warn before operate" system
- Built-in timer to close
- 32 character LCD, 5 button user interface
- 24 programmable output relay options
- Anti-tailgate mode





SlideSmart DC - Polyurethane cover removed to expose Smart DC Controller with full 32 character LCD screen and 5 tact buttons for programming; zinc-plated chassis; large conduit cutout; AC and DC power switches; and more.

Access

- Card reader - Reads a card that, when verified, signals the operator to cycle
- Keypad - When properly addressed, signals the operator to cycle
- Keyswitch - A simple switch that is closed by turning a key in a lock cylinder, which in turn signals the operator to cycle
- Pushbuttons

Note - The card reader, keypad and keyswitch are not sold by HySecurity, but are available from most HySecurity distributors.

Security

- Vehicle detector - Detects vehicles in the gate's path and will not allow the gate to close if activated; will cause the gate to reverse if the closing cycle is interrupted by vehicle
- Rotating beacon
- Flashing lights

SIZES

See Table 1.

COLOR

Fade-resistant gray polyurethane.

BENEFITS

- Gate panel capacity of 1000 - 1500 lb (455 - 682 kg)
- Open and close rates of 0.75' - 2.25' (0.23 - 0.69 m) per second
- Quick, easy installation
- Site-specific operator control programming
- Low maintenance
- Fully compatible with all standard access control equipment

Model	SlideSmart DC 15	SlideSmart DCS 15	SlideSmart DC 10F	SlideSmart DCS 10F
Application	Residential, commercial	Residential, commercial	Commercial, industrial	Commercial industrial
Gate type	Heavier gates	Heavier gates, solar version	Faster gates	Faster gates; solar version
Max. Gate Weight	1500 lb (682 kg)	1500 lb (682 kg)	1000 lb (455 kg)	1000 lb (455 kg)
Max. Gate Length	40' (12 m)	40' (12 m)	40' (12 m)	40' (12 m)
Rate of Travel	0.75' - 1.25' (0.23 - 0.38 m) per second	0.75' - 1.25' (0.23 - 0.38 m) per second	1.75' - 2.25' (0.53 - 0.69 m) per second	1.75' - 2.25' (0.53 - 0.69 m) per second
<i>NOTE: Open/close rates are set separately</i>				
Duty Cycle	Continuous	Continuous	Continuous	Continuous
Horsepower	1/2 hp	1/2 hp	1/2 hp	1/2 hp
Temperature Rating	-13° F to 158° F (-25° C to 70° C)	-13° F to 158° F (-25° C to 70° C)	-13° F to 158° F (-25° C to 70° C)	-13° F to 158° F (-25° C to 70° C)
Soft Stop	Yes	Yes	Yes	Yes
Soft Start	Yes	Yes	Yes	Yes
UL Listing	I, II, III, IV *	I, II, III, IV *	III, IV	III, IV
* UL Class III and IV only when faster than 1 ft/second				

- Built-in multi-level power surge and lightning strike protection
- Multi-stage intelligent battery charging under microprocessor control
- EEPROM event logging capability for troubleshooting diagnostics
- RS232 and USB port for laptop or other computer peripheral connection and RS485 connection of Master/Slave systems
- 1-wire input terminal connections and common wire bus
- Pulse width modulated motor control

Smart DC Controller's RS485 2-way communication bus allows maximum security system integration. Its ability to communicate between the operator and any remote system enables users to define automated activation of security equipment (security cameras, alarms, etc., in response to specific reported incidents.

TYPES

Models

- SlideSmart DC 15 - Designed for heavier gates up to 1500 lb (682 kg), SlideSmart DC 15 achieves gate travel of 0.75' - 1.25' (0.23 - 0.38 m) per second; continuous duty rated; meets UL class I, II, III and IV; utilizes Soft Stop and Soft Start technology for safe, smooth and predictable gate handling

- SlideSmart DCS 15 - Identical to SlideSmart DC 15, but in solar ready configuration
- SlideSmart DC 10F - Designed for gates weighing up to 1000 lb (455 kg), SlideSmart DC 10F achieves gate travel of 1.75' - 2.25' (0.53 - 0.69 m) per second; continuous duty rated; meets UL class III and IV; utilizes Soft Stop and Soft Start technology for safe, smooth and predictable gate handling
- SlideSmart DCS 10F - Identical to SlideSmart DC 10F, but in solar ready configuration

OPTIONS, ACCESSORIES

Safety

- Gate edge sensor - Will reverse the gate if it contacts an object during opening or closing
- Photoelectric eye - If beam is obstructed, will not allow gate to start closed; will reverse gate if beam is interrupted during opening/closing cycle

Convenience

- Base riser
- Post mount plate
- Extended battery backup - Two 50 Amp hour batteries with a base riser
- Radio controls - Wireless transmitters, similar to those used to open and close garage doors, signal a receiver in the operator to operate the gate





SlideSmart DC 15 operating a high cycle, 800 lb (363 kg) chain link gate in winter weather conditions. SlideSmart reliably operates at temperatures as low as -13 degrees F (-25 degrees C) without a heater.

- Reduced wear on gate and gate hardware with Soft Start and Soft Stop technology

LIMITATIONS

Vehicle gates are not to be used for pedestrian access. Separate pedestrian gates must always be provided when foot traffic is present.

4. Technical Data

APPLICABLE STANDARDS

ASTM International (ASTM) - ASTM F2200 Standard Specification for Automated Vehicular Gate Construction

Underwriters Laboratories, Inc. (UL) - UL 325 Door, Drapery, Gate, Louver, and Window Operators and Systems

National Fire Protection Association (NFPA) - NFPA 70 National Electrical Code

APPROVALS

Underwriters Laboratories, Inc. (UL) - Listed to UL 325 Class I, II, III and IV for speeds to 1 ft/second. Listed to UL 325 Class III and IV only for speeds faster than 1 ft/second.

5. Installation

PREPARATORY WORK

Deliver products in manufacturer's original, unopened, undamaged containers with identification labels intact. Store products upright in the

original shipping containers, covered, ventilated and protected from all weather conditions.

Locate concrete mounting pad in accordance with approved shop drawings. Verify that site conditions are acceptable for installation. Do not proceed with installation until unacceptable conditions are corrected.

Make sure the operator is located the proper distance from the gate, and that the gate and operator are parallel.

Make sure the gate rolls smoothly in both directions, without any binding of the gate hardware. If the gate is warped or hard to move, stop and fix the gate before attempting to automate.

METHODS

Install gate operator in accordance with manufacturer's printed instructions. Coordinate locations of operators with contract drawings, other trades and shop drawings. Ensure that the electric service to the operator is at least 20 amps and that wire size conforms to specific operator requirements.

Test the basic operator functions through 10 full cycles and adjust to ensure gate operates smoothly without binding, scraping or uneven motion.

Detailed installation instructions are available online at www.hysecurity.com.

PRECAUTIONS

All horizontal slide gate openings must be guarded or screened from the bottom of the gate to a minimum of 4' (1.2 m) height above the ground. This safety requirement is intended to prevent an object 2 1/4" (57 mm) in diameter (the same dimension as a diamond-shaped opening in a standard chain link fence) from passing through an opening in the gate or through a gap between the gate and the adjacent fence.

All exposed pinch points, rollers and wheels must be guarded. To reduce the risk of entrapment, the gate must also be installed so that enough clearance is provided between the gate and adjacent structures, both when opening and closing. Minimize the parallel gap between the gate and the fence.

The gate must be constructed with physical stops to prevent overtravel in both directions and must have guard posts to prevent the gate from falling in the event of a roller failure.

Covers for all exposed gate support wheels must be installed.

BUILDING CODES

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6. Availability & Cost

AVAILABILITY

HySecurity operators, accessories and parts are stocked by distributors and installers worldwide. Contact the manufacturer for local distributor information.

COST

Contact HySecurity for pricing details and/or budget estimates.

7. Warranty

The HySecurity SlideSmart DC gate operator is supported by a 5 year warranty or 7 year single-family residential warranty when it is installed by a licensed contractor and registered with HySecurity. A nationwide network of distributors and installers is available to service the warranty. Labor and other costs to replace defective components are excluded from this factory warranty; however, these costs may be covered through the local installing company. Complete warranty terms and conditions are available from the manufacturer. For details, consult HySecurity.

8. Maintenance

Detailed maintenance instructions are available online at www.hysecurity.com. Brief maintenance guidelines are described below.

Electrical Controls

No routine maintenance is needed for the electrical system or controls. If the environment is very sandy, dusty or has many insects, seal all holes in the electrical enclosure. Blow dust out of the electric panel with compressed air.

Gate

Gate should be inspected monthly to ensure smooth operation.

9. Technical Services

For project-specific technical assistance, contact HySecurity. For more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, contact HySecurity or visit www.hysecurity.com.

Detailed technical information, installation instructions, schematics, troubleshooting information and technical bulletins, are available online at www.hysecurity.com.

10. Filing Systems

Additional product information is available from the manufacturer upon request.