

HydraWedge™ SM50

Seamless, fast-opening in-ground security

Shallow foundation wedge features HySecurity hydraulic power and controls. This high-cycle, vehicle wedge barrier has three domestic and international crash certifications.

Features:



Rating:
Zero-penetration, crash-rated wedge barrier*.



Reliable:
Long-life, low-maintenance wedge with optional UPS backup providing hundreds of cycles after power loss.



Programmable:
Customized, configurable settings for site specific requirements.



Fast:
Open times in as little as one second provide high cycle, fast throughput for managing traffic and maintain high security.



Installation:
Fast installation, small footprint and foundation using 12 inch shallow mount design and minimal rebar.



Troubleshooting:
Easy system troubleshooting with onboard event log.



Made in USA:
Designed, tested and built within USA from globally sourced materials.



HydraWedge™ SM50

Seamless, fast-opening
in-ground security



powered by
SmartTouch

Technical Specifications

Model	HydraWedge SM50	HydraWedge SM50 UPS	HydraWedge SM50 Twin	HydraWedge SM50 Twin UPS
Crash Certified	Domestic ASTM F2656-15 M50-P1 and international IWA 14-1 V/7200[N3C]/80/90:0.0 and PAS68 V/7500[N3]/80/90:0.0/20.7 with no penetration † †			
Duty Cycle	300 cycles/hr		400 cycles/hr divided between 2 wedges	
Horsepower	2 hp		5 hp	4 hp
Drive	Hydraulic			
Open/Close Time	3-4 seconds			
Emergency Fast Operate	1 second			
Manual Operation	Hand pump (standard)			
Wedge Design	Plate width: 2, 2.5, 3, 3.5, 4 m* (6.5, 8, 10, 11.5, 13 ft); Plate height (raised): 1000 mm (3.3 ft); Excavation width: Plate width + 700 mm (27.5 inch); Excavation length: 3.7 m (12 ft); Excavation depth:** 300 mm (1 ft)			
Wheel Load	44,000 lb axle load rating; 22,000 lb wheel load			
UPS Battery Backup Cycles	Standard model generates multiple cycles from fully charged accumulator.	DC Power Supply w/HyCharger DC™ provides hundreds of cycles after AC power loss.***	Standard model generates multiple cycles from fully charged accumulator.	DC Power Supply w/HyCharger DC™ provides hundreds of cycles after AC power loss.***
Backup Cycles	4 cycles: 2.5 gallons accumulator	Hundreds of UPS cycles.	4 cycles: 2.5 gallons accumulator	Hundreds of UPS cycles.
Temperature Rating	-40° to 158° F (-40° to 70° C) or -10° to 158° F (-23° to 70° C) HySecurity specified biodegradable fluid			
Single Phase Voltages	208-230V 60Hz, 220V 50Hz*	115V 60/50Hz 23A† or 208-230V 60/50Hz 11.5A. Choose voltage with care as chargers are not field convertible.	230V 60Hz, 220V 50Hz*	115V 50/60Hz 23A† or 208-230V 50/60Hz 11.5A. Choose voltage with care as chargers are not field convertible
Three Phase Voltages	208-230/460V 60Hz, 220/380/440V 50Hz***	N/A	208-230/460V 60Hz, 220/380/440V 50Hz***	N/A
Batteries	Two 8Ah batteries maintain low voltage to the controls for 24 hours after AC power loss	Two 110 Ah batteries located in separate DC UPS enclosure	Two 8Ah batteries maintain low voltage to the controls for 24 hours after AC power loss	Two 110Ah batteries located in the DC UPS enclosure
Communication	RS-232, RS-485			
User Controls	Smart Touch Controller with 70+ configurable settings. Smart Touch keypad and 32 character, OLED display or a PC using S.T.A.R.T. software.			
Relays	Three configurable user relays: one 30VDC, 3A solid state and two 250VAC, 10A electromechanical. Optional Hy8Relay™ for 8 additional relay outputs.			
Enclosure	HydraSupply XL: Type 3R, 91w x 122h x 41d cm (36w x 48h x 16d inch), optional NEMA 4X	HydraSupply XL: Type 3R, 91w x 122h x 41d cm (36w x 48h x 16d inch), optional NEMA 4X; DC Power Supply: Type 3R, 76w x 76h x 30d cm (30w x 30h x 12d inch)	HydraSupply XL: Type 3R, 91w x 122h x 41d cm (36w x 48h x 16d inch), optional NEMA 4X	HydraSupply XL: Type 3R, 91w x 122h x 41d cm (36w x 48h x 16d inch), optional NEMA 4X; DC Power Supply: Type 3R, 76w x 76h x 30d cm (30w x 30h x 12d inch)
Finish	Stone gray powder coated, 2,000 hr salt spray tested			
Foundation	Less than 300 mm** (1 ft) concrete depth all widths up to 4.15 m (13.5 ft); less than 218 kg (480 lb) rebar; less than 3.1 m ³ (4 cu yds) concrete		Less than 300 mm** (1 ft) concrete depth all widths up to 4.15 m (13.5 ft); less than 218 kg (480 lb) rebar; less than 3.1 m ³ (4 cu yds) concrete (per wedge)	
ETL Listed (UL 325)	Control panel certified to UL 508A by ETL			
Warranty	5 year warranty on electronics and hydraulics w/product registration. 2 year warranty on mechanical wedge.			

* Wedge manufactured in metric scale. Use for precision measurements. All imperial measurements rounded to nearest 1/2 ft.

† 115 input requires 30A branch circuit.

†† Ratings: ASTM F2656-15 M50-P1 IWA14-1: 2013 PAS 68: 2013. Contact HySecurity to receive a copy of the ASTM F2656-15 M50-P1 Test Certification.

** 300 mm excavation: 200 mm reinforcing concrete + 100 mm roadway surface of any material

***The operators normal duty cycle and the actual number of combined cycles available from batteries depends upon wedge plate weight, number of batteries, state of charge and health, ambient temperature, accessory power draw and frequency of gate cycles during power outage.



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Nice/HySecurity is an industry leader of automated gate and perimeter security solutions.

The HySecurity brand provides high-quality, ultra-reliable industrial gate operators and crash-rated, Hostile Vehicle Mitigation (HVM) vehicle barriers designed to secure and protect critical infrastructure and facilities worldwide.

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