

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

**Connected:**

Real time system security alerts with
optional HyNet™ Gateway

**Fast:**

Open times in as little as one second
provide high cycle, fast throughput
for managing traffic and maintaining
high security

**Installation:**

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

**Troubleshooting:**

Easy system troubleshooting with
onboard event log

**Made in the USA:**

HydraSupply XL Designed, tested
and built with global materials



HydraWedge SM50

High Security Anti-Ram



powered by
SmartTouch

Technical Specifications

Model	HydraWedge SM50	HydraWedge SM50 UPS	HydraWedge SM50 Twin	HydraWedge SM50 Twin UPS
Crash Certified	Domestic ASTM F2656 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	2 hp	5 hp	4 hp
Drive	Hydraulic			
Open/Close Time	3 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 (19,958 Kg. / 9,979 Kg)			
UPS Battery Backup Cycles***	Standard model generates multiple cycles from fully charged accumulator	Hundreds of cycles after AC power loss with DC Power Supply w/ HyCharger DC™ ***	Standard model generates multiple cycles from fully charged accumulator	Hundreds of cycles after AC power loss with DC Power Supply w/HyCharger DC™ ***
Accumulator Backup Cycles: Either normal or EFO	4 cycles 2.5 gallon accumulator	4 accumulator cycles in addition to hundreds of UPS cycles. 2.5 gallon accumulator	4 cycles divided between two wedges. 2.5 gallon accumulator	4 additional accumulator cycles divided between two wedges in addition to hundreds of UPS cycles. 2.5 gallon accumulator
1 Phase Power	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 60/50Hz 23A † or 208-230V 60/50Hz 11.5A Choose voltage with care as chargers are not field convertible
3 Phase Power	208/230/460V; 220/380/440V 50HZ	n/a	208/230/460V; 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 110 Ah batteries located in separate DC UPS enclosure
Temperature Rating	-40° to 158° F (-40° to 70° C) or -10° to 158° F (-23° to 70° C) HySecurity specified biodegradable fluid			
Communication	RS-232, RS-485, Ethernet/fiber using optional HyNet™ Gateway accessory			
User Controls	Smart Touch Controller with 70+ configurable settings, programmed via the keypad and 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	Powder coated, 2,000 hr salt spray tested			
Foundation	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 m3 (4 cu yds) concrete (per wedge)			
Electrical Certification	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.			

* 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 operator's 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.

† 115V input requires 30A branch circuit

Only HySecurity authorized distributors and installers, trained or authorized by HySecurity in proper installation techniques, operation and maintenance, are eligible to purchase HySecurity's crash-rated barrier products.