01

# AUTOMATION + ACCESSORIES

Manufactured inhouse by SEA



# AUSTRALIA \_ NEW ZEALAND

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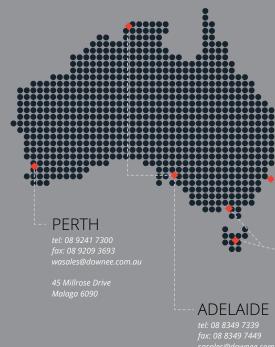
### Downee

### CONTACT US

### PARTNER

partner to SEA Automation includes keeping all SEA products warranty claims for operators still

within the warranty period.



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### TECHNICAL **TRADE ASSIST**

AUSTRALIA 1800 241 733

*NEW ZEALAND* 0800 241 733

SEA Operators are Same Day Despatch (orders before 2pm)



### MADE @SEA MADE IN-HOUSE

#### COMPLETE QUALITY CONTROL

SEA's core business is manufacturing hydraulic automation products completely in-house to oversee the entire process while ensuring complete quality control.

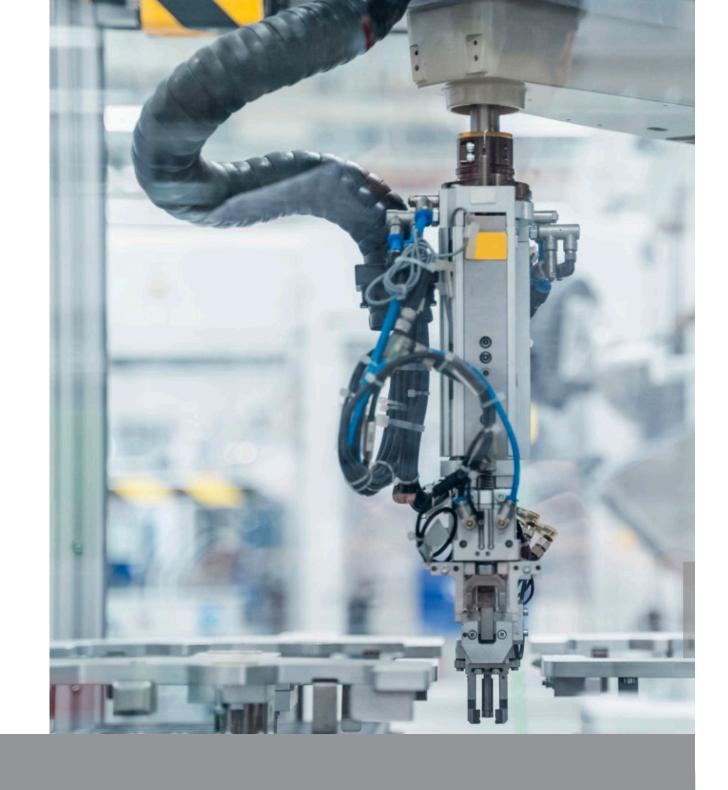
Thanks to this strategy, SEA produces a wide range of reliable products, to immediately achieve an important share of markets worldwide. Today SEA is a leading growing group with customers' service centers located worldwide.











COMMITMENT TO

Reliability, Design, High Performance, Ease of Use. These are the core of SEA's philosophy and the basis of our success which has made it possible to meet the market demands and achieve the loyalty of customers throughout over 50 countries.

All SEA products are manufactured inhouse at our modern manufacturing plan of more than 11.000 sqm based in Italy. Our products undergo a progressive series of controls during all phases of the production cycles. Strict tests are carried out in our technical laboratories to make sure that each product respects the security, reliability and durability standards, the current regulations and market demands. In a short 25-years SEA has established itself a leader in the field of perimeter automation. Our customers include the elite of the European perimeter protection industry. They demand quality, competency and solutions to complex issues. Most of all they expect reliability, smart design, a high performance product and easy to use.

### INVERTER TECHNOLOGY

#### WHY USE AN INVERTER DRIVE MOTOR?

The standard power supply frequency in Australia and New Zealand is 50Hz.

By using a frequency variator, more commonly referred to as an inverter, it becomes possible to change the operating frequency within SEA gate operators from a very low operating frequency up to almost 100Hz, depending on the operator type.

The speed of an inverter driven AC operator is proportional to its operating frequency, so as the frequency level is increased or decreased, so is the speed of the operator.

The main benefit of an Inverter Drive operator, is no loss of torque, even when operating at very slow speeds, including the slow down phase of the gate operator.

Conventional operators which use other forms of speed control, suffer from reduced torque as the operating speed is reduced. Non inverter AC gate operators also suffer from higher operating temperatures when exposed to high duty cycles, or when installed in more demanding applications such as gates on an incline, or telescopic gates. In these instances, conventional AC operators may shut down through thermal overload, if the demand placed upon them is too great.

SEA Inverter Drive operators cycle much cooler in these applications, as they are specifically designed for intensive use with non triac capacitors, and therefore suit high torque applications. Some gate operator manufacturers source "off the shelf" generic inverter drives from the open market, which may compromise the performance of the operator.

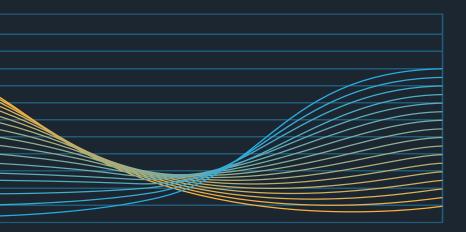
SEA Inverter Drives are designed, engineered and manufactured by SEA specifically to suit their own gate operators, and are filtered, to reduce the effects of electrical noise and interference with other wireless devices.

Since SEA design and manufacture their own Inverter Drives, they are able to provide firmware updates as technological improvements are made, and offer a range of inverter sizes to suit the specific operator.

The Inverter Drive is controlled by the same logic control board, regardless of the size of the Inverter Drive, and the logic control board has the capacity to control two separate Inverter Drives for double swing gate operators.

A USB cable provides the connection between the Inverter Drive and the logic control board, simplifying the installation process, and also provides electrical protection against voltage spikes. By separating the logic control board from the Inverter Drive, reduces the replacement cost, should they ever be required. To ensure after sales backup is available, a comprehensive range of spare parts, including Inverter Drives and logic control boards are readily available from Downee.

Most SEA Inverter Drive operators stocked by Downee, require only a 230V AC single phase mains power supply. The output of the Inverter Drive provides a three phase power supply which is connected directly to the electric motor. The operating speed and direction of the operator is easily changed by parameter settings on the logic control board. The speed parameters are expressed as percentages, and the output frequency is controlled electronically to provide the desired speed. The operator direction is also controlled electronically, eliminating the need for swapping the output phase wiring to the electric motor.



SEA Inverter Drive operators are robust, reliable and deliver optimum performance, even in the most demanding of applications.

### HYDRAULICS IS THE FUTURE

In recent decades advances in manufacturing and materials have dramatically improved overall performance.

With decades of experience in the manufacturing of hydraulic motors, SEA have perfected the integration of the hydraulic motor, control unit and inverter technology to achieve peak performance.

Despite market perception of some gate installers on hydraulic motors, SEA's range of gate operators are the logical choice for Industrial and Commercial applications.

#### Why install a SEA Hydraulic motor?

- Fast
- Easily maintained
- Powerful
- Long life span
- High duty cycle
- Mechanical adjustable motor torque
- Integrated motor locking
- Unigate control board for all hydraulic motors

When it comes to demanding duty cycles, hydraulic operators dominate.

#### VARIABLE SPEED WITH MAXIMUM TORQUE

The SEA hydraulic range of operators have been developed and perfected over 25 years. As SEA design and manufacture their own pumps, the build of their operators has been engineered from a range of selected in house manufactured components. The key components are:

- Hydraulic pump configuration (gear pump or lobe pump)
- Pump capacity (up to 4L for the lobe pump and 6L for the gear pump)
- Electric motor (2 pole or 4 pole to suit the operator speed range of 2800rpm and 1400rpm respectively)
- UNIGATE Inverter Drive

Using a combination of the above components, a variable operating speed whilst delivering high torque is achieved, to provide the optimum output for each Hydraulic operator. This is particularly valuable in the slow down opening and closing stroke.

#### DUTY CYCLE

SEA Hydraulic operators excel in high duty cycle applications. Not only are they engineered with Inverter Drive motors for this exact purpose, but when combined with SEA's hydraulic pump technology, these operators deliver superior performance, even in the most demanding of duty cycle applications. This makes the SEA range of Hydraulic operators the obvious choice in high traffic applications, including public carparks, emergency services, Industrial compounds and harsh environments due to the IP55 rating of their linear operators.

#### **PUMP CONFIGURATION AND CAPACITY**

SEA use both Gear Pumps and Lobe Pumps, depending on the specific operator.

Gear Pumps are used on large operators, due to their ability to consistently pump high volumes of hydraulic fluid, particularly on the linear operators which have a stroke up to 1000mm on their largest Super Full Tank operator.

These larger pumps have up to 6L of hydraulic fluid capacity, which ensures smooth and consistent performance over the entire movement of the gate leaf.

The smaller Hydraulic operators utilise a Lobe Pump. These pump types provide a more efficient delivery of Hydraulic fluid where smaller volume capacities are required. Generally, the Lobe Pumps are used with capacities of less than 4L.

#### INTEGRATED LOCK

SEA Hydraulic operators can be configured with an integrated lock within the hydraulic fluid circuit.

The flexibility of this lock design, allows for the operator to be configured with an integrated lock in the following gate operator conditions:

- Locked in open position
- Locked in closed position
- Locked in both open and closed positions
- No integrated lock

\*\*Please note that external gate locks are always recommended on larger gates, as specified for each respective model.

#### HYDRAULIC LONGEVITY

.

Unlike electromechanical operators, there is no mechanical gear drive train with Hydraulic operators. This translates to a significant reduction in general wear and tear, and there are no mechanical losses which often exist through transmission gear ratios. SEA Hydraulic operators are easily serviced, with the majority of maintenance limited to an occasional hydraulic fluid change, and if necessary, oil seal replacement.

Replacement seals and hydraulic fluid are readily available as spare parts from Downee. This means the expected lifespan of a Hydraulic operator, will far exceed an electromechanical operator when placed in the same application.

We have case studies of SEA hydraulic operators still in service over 20 years later, which is a testament to the quality and longevity you can expect from the SEA operators.



SEA Hydraulic operators are built for High Duty cycle and demanding Commercial and Industrial applications, where maximum torque is required. They require minimal service intervals, and are built to significant IP ratings to ensure they deliver consistent ongoing performance, even in the harshest of environments throughout Australia and New Zealand.

### BRUSHLESS TECHNOLOGY

#### Intensive Use

Thanks to their background in manufacturing electrical motors, SEA has identified a need in the market for an improved range of operators which can follow the trend of other industries by implementing a range of brushless electric motors. This new and complex technology is a direct result of SEA's innovation and commitment to manufacturing industry leading products.

SEA plan to offer a range of brushless products in both electromechanical and hydraulic operators which will help to cover some of the commercial and industrial applications and of course residential as well.

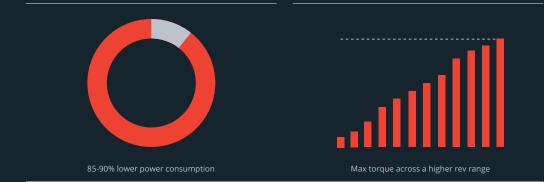
Where we see brushless being used:

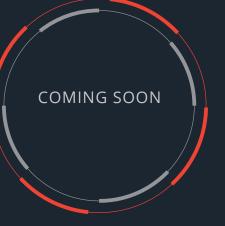
- High duty cycle driven in a similar way to an inverter.
- 36V operated low-power consumption for solar applications and increased battery run time
- Can add battery backup/solar operatio
- Reverse in case of obstacle
- Setting ramps of acceleration and deceleration for smooth operation
- Motor without brushes and cummutato
- Same logic controller as the UNIGATE.
- Built in timer, digital display, 2 x relays to activate any command, battery back up for the timer

Downee looks forward to the opportunity to provide an innovative solution valued by the industry

Watch this space. Your local Downee team member can keep you up to date, or register on our website for our regular product updates.

### Brushless technology provides intensive use and a motor with constant torque.





### SURF 450



SECONDS TO 90°



% DUTY CYCLE

4.5

MAXIMUM GATE LENGTH

Surf is a robust, 24V electromechanical swing gate operator with powder coated cast aluminium body.

For gates up to 4.5m or 400kg

BUILT-IN ELECTROME-CHANICAL LIMIT SWITCHES

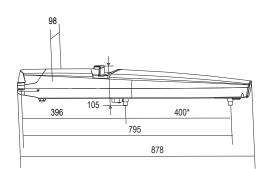


ALL METAL INTERNAL COMPONENTS













Surf 450 can be used on solar applications or add battery backup on request.



BACK MOUNT Adjustable post mount brackets. No welding. AAC-BRASU

AC-BRASUA	

Bolt-on gate brackets.

FRONT MOUNT

ORDER CODE	SURF450
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	24 V (DC)
MOTOR POWER	60 W
MAX. OPEN ANGLE	120°
MAX. CYCLES PER HOUR	90*
DUTY CYCLE	50 %*

\*Maximum duty cycle based on the first working hour in a testing environment. \*\* Electric/magnetic locks should be fitted on gates 2m+ to protect gate and operator from damage by wind or forced entry.

Downee.com.au

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### CONTROLLER



### DIGITAL PROGRAMMING

24V SURF 450 is supplied with USER-2 Digital control board housed in an IP rated enclosure with transformer.

### 400KG

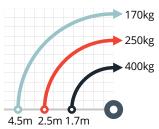
OUT SWING BRACKETS

Allows gates to open

outwards.

AAC-BRASUO

Details on page 26



MAX. GATE WEIGHT	400 KG
MAX. GATE LENGTH	4.5 M**
TIME TO 90°	21 SEC
MAX. THRUST	2000 N
LIMIT SWITCH	MECHANICAL-ELECTRONIC
DIMENSIONS (H-W-L)	98, 98, 878
WORKING TEMP.	-20°/+55°C



### **KITE 500**

Kite is a robust, 24v Electromechanical swing gate operator with powder coated cast aluminium body.

Stops needed in open & closed positions.

SECONDS TO 90°

% DUTY CYCLE

MAXIMUM GATE LENGTH

ACCEPTS ESUN Q TO ADD BATTERY BACK UP OR SOLAR

23

50

5.0

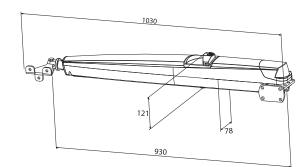




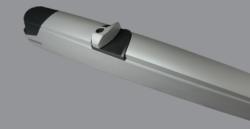




LOCKABLE CAST ALUMINIUM RELEASE LEVER







Kite 500 can be used on solar applications or add battery backup on request.



BACK MOUNT Adjustable post mount brackets. No welding. AAC-BRASU

FRONT MOUNT Bolt-on gate brackets.

C-BRASU	AAC-BRASUA
ORDER CODE	KITE500
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	24 V (DC)

MOTOR POWER	60 W
MAX. OPEN ANGLE	120°
MAX. CYCLES PER HOUR	90*
DUTY CYCLE	50 %*

\*Maximum duty cycle based on the first working hour in a testing environment. \*\* Electric/magnetic locks should be fitted on gates 2m+ to protect gate and operator from damage by wind or forced entry.

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### CONTROLLER



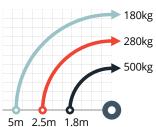
#### DIGITAL PROGRAMMING

24V KITE 500 is supplied with USER-2 Digital control board housed in an IP rated enclosure with transformer.

### 500KG

Details on page 26





outwards. AAC-BRASUO			
MAX. GATE WEIGHT MAX. GATE LENGTH TIME TO 90°			

OUT SWING BRACKETS

Allows gates to open

MAX. THRUST LIMIT SWITCH DIMENSIONS (H-W-L) WORKING TEMP.

500 KG 5.0 M\*\* 23 SEC 2000 N PHYSICAL STOPS REQUIRED 121, 78, 930 -20°/+55°C

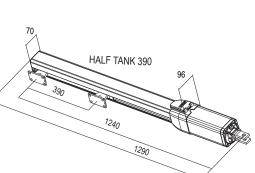




\*Maximum duty cycle based on the first working hour in a testing environment. \*\* Electric/magnetic locks should be fitted on gates 2m+ to protect gate and operator from damage by wind or forced entry. Lockable in open & close, open only, close only or no lock options.

*Hydraulic swing gate operator* suitable for intensive use applications or gates with me-dium to heavy infill and windy locations.

Max. leaf length of 7m when used with suitable lock in open and closed positions.



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🤄 SEA MADE IN ITALY 🔲

### 700KG

OUTSWING

BRACKETS

AAC-BRAHTO

### CONTROLLER

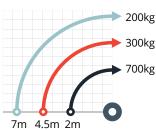


### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25





MAX. GATE WEIGHT
MAX. GATE LENGTH
TIME TO 90°
MAX. TORQUE
LIMIT SWITCH
DIMENSIONS (H-W-L)
WORKING TEMP.

MOUNT BRACKETS

AAC-BRAHT

700 KG 7 M\*\* 16 SEC 6400 N MECHANICAL-ELECTRONIC 96, 96, 1290 -20°/+55°C



### SUPER FULL TANK 500

Industrial hydraulic swing gate operator suitable for intensive use applications.

Max leaf length of 9m when used with suitable lock in open and closed positions. Note in some applications it may be possible to install on gates up to 4m without the use of electric or magnetic locks.

Physical gate stops required in open and closed positions.

*Hydraulic slowdown is stan-dard on all super full tank* operators.







MAXIMUM GATE LENGTH

SIX LITRE PUMP

9.0

UNIGATE INVERTER EQUIPPED

#### VARIABLE SPEED HIGH-SPEED SHAFT





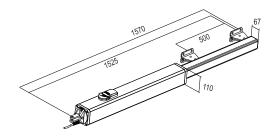


🤄 SEA MADE IN ITALY 🔲



HYDRAULIC

Hydraulic operators suit intensive use environments and their high thrust output makes them suitable for extra large gates.



ORDER CODE	SFTANK
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase 230 V (AC)
MOTOR POWER	310 W
MAX. OPEN ANGLE	125°
MAX. CYCLES PER HOUR	100*
DUTY CYCLE	100 %*
PUMP SIZE	6.0 L

\*Maximum duty cycle based on the first working hour in a testing environment. \*\* Electric/magnetic locks should be fitted on gates 4m+ to protect gate and operator from damage by wind or forced entry. Lockable in open & close, open only, close only or no lock options.







### 2000KG

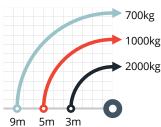
### CONTROLLER



### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25



MAX. GATE WEIGHT	2000 KG
MAX. GATE LENGTH	9.0 M**
TIME TO 90°	16.5 SEC
MAX. TORQUE	25000 N
LIMIT SWITCH	OPEN & CLOSE GATE STOPS REQUIRED
DIMENSIONS (H-W-L)	110, 110, 1570
WORKING TEMP.	-20°/+55°C



### SUPER FULL TANK 1000

### operator currently on the market.

Note in some applications it may be possible to install on gates up to 12m or 6m without the use of electric or magnetic locks. For industrial and high duty cycle applications.



0)	% DUTY	CYC
0)	% DUTY	CY(

MAXIMUM GATE LENGTH

LE

MACHINED FRONT & REAR FLANGES

17

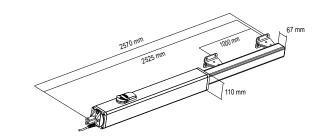
MANUAL RELEASE

### SPHERICAL JOINT FOR STROKE ADJUSTMENT









Hydraulic operators suit intensive

use environments and their high

for extra large gates.

thrust output makes them suitable

HYDRAULIC

ORDER CODE	SFTANK1000
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase 230 V (AC)
MOTOR POWER	310 W
MAX. OPEN ANGLE	125°
MAX. CYCLES PER HOUR	40*
DUTY CYCLE	100 %*
PUMP SIZE	6.0 L

\*Maximum duty cycle based on the first working hour in a testing environment \*\* Electric/magnetic locks should be fitted on gates 6m+ to protect gate and operator from damage by wind or forced entry.

The strongest swing gate

Downee.com.au

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### 2500KG

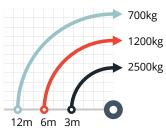
### CONTROLLER



### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25



MAX. GATE WEIGHT	2500 KG
MAX. GATE LENGTH	12 M**
TIME TO 90°	33 SEC
MAX. TORQUE	25000 N
LIMIT SWITCH	OPEN & CLOSE GATE STOPS REQUIRED
DIMENSIONS (H-W-L)	110, 110, 2570
WORKING TEMP.	-20°/+55°C



	JOINT				SEA MADE IN ITALY	•
					CSEA	
Articulated, inverter-equipped hydraulic swing gate operator. Suits leaves up to 6m or 450kg.	(8.0) SECO	NDS TO 90°				
	(100) % DU	ITY CYCLE		HYDRAULIC	Hydraulic operators s	uit intensive
	(6.0) MAXI	MUM GATE LENGT	Η	DRIVE	use environments and thrust output makes t for extra large gates.	d their high
				Ň	NODEL	CODE
	SECURE INTERNAL MANUAL RELEASE	ELECTRONIC LIMIT SWITCH	STAINLESS STEEL ENCLOSURE	S S	MASTER - LEFT SLAVE- LEFT MASTER - RIGHT SLAVE- RIGHT Shoose from four models. Mast	JOINT-MASTER-LH JOINT-SLAVE-LH JOINT-MASTER-RH JOINT-SLAVE-RH ter or slave, left or right side.
				1	POWER SUPPLY MOTOR VOLTAGE MOTOR POWER	SINGLE PHASE 3-Phase 230 V (AC) 280 W
		- 485 -	Two position - 656 / 766	1	MAX. OPEN ANGLE MAX. CYCLES PER HOUR DUTY CYCLE	100° 200* 100%*
	585 20			F	PUMP SIZE	1.0 L

400

PAD MOUNT

Ø 16.5

\*Maximum duty cycle based on the first working hour in a testing environment. \*\* Electric/magnetic locks should be fitted on gates 2m+ to protect gate and operator from damage by wind or forced entry.

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### 455KG

PAD MOUNT Base to mount operator on concrete. AAC-BRAJO

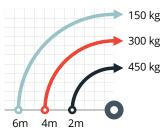
### CONTROLLER



### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25



MAX. GATE WEIGHT	455 KG
MAX. GATE LENGTH	6.0 M**
TIME TO 90°	8 SEC
MAX. TORQUE	560 NM
LIMIT SWITCH	ELECTRONIC
DIMENSIONS (H-W-L)	301, 260, 485
WORKING TEMP.	-20°/+55° C



### SATURN SUPER FAST 500





mechanical specification makes it fast, strong, safe and reliable. Housed in a solid die-cast aluminium body with high quality mechanical limit switches.

The Saturn's high-level







MAXIMUM GATE WEIGHT

CATAPHORESIS TREATMENT





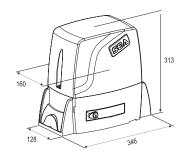








Saturn can be used on solar applications or add battery backup on request.



ORDER CODE	SATURN500	MAX. GATE WEIGHT	500 KG
POWER SUPPLY	SINGLE PHASE	PINION SIZE	Z20
MOTOR VOLTAGE	24 V (DC)	PINION HEIGHT	105 MM
GATE SPEED	TO 450 MM/SEC (27 M/MIN)	LIMIT SWITCH	MECHANICAL
MOTOR POWER	100 W	PROTECTION DEGREE	IP55
MAX. CYCLES PER HOUR	120*	DIMENSIONS (H-W-L)	313, 160, 346
DUTY CYCLE	75 %*	WORKING TEMP.	-20°/+55°C

Downee.com.au

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\*Maximum duty cycle based on the first working hour in a testing environment.



### CONTROLLER



### DIGITAL PROGRAMMING

SATURN SUPER FAST is supplied with built in USER-1 control panel.

### 500KG

Details on page 26



### SATURN FAST 1200





The Saturn's high-level mechanical specification makes it fast, strong, safe and reliable. Housed in a solid die-cast aluminium body with high quality mechanical limit switches.





MAXIMUM GATE WEIGHT

OIL BATH LUBRICATION

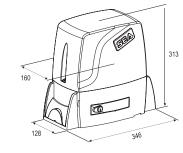


OPTIONAL CARDS FOR BATTERY BACK UP AND SOLAR



MANUAL RELEASE WITH MICROSWITCH STOP





Saturn can be used on solar

applications or add

ORDER CODE	SATURN1200	MAX. GATE WEIGHT	1200 KG
POWER SUPPLY	SINGLE PHASE	PINION SIZE	Z16
MOTOR VOLTAGE	24 V (DC)	PINION HEIGHT	95 MM
GATE SPEED	TO 320 MM/SEC (19 M/MIN)	LIMIT SWITCH	MECHANICAL
MOTOR POWER	100 W	PROTECTION DEGREE	IP55
MAX. CYCLES PER HOUR	90*	DIMENSIONS (H-W-L)	313, 160, 346
DUTY CYCLE	75 %*	WORKING TEMP.	-20°/+55° C

Downee.com.au

Accessories page 28

\*Maximum duty cycle based on the first working hour in a testing environment.



### CONTROLLER



### DIGITAL PROGRAMMING

SATURN FAST 1200 is supplied with built in USER-1 control panel.

### 1200KG

Details on page 26



### **BOXER 2000**

A powerful, reliable operator at an excellent quality/price ratio.

Inverter driven motor controlled by the UNIGATE-i control panel and oil lubrication makes Boxer 2000 the perfect choice for intensive use with moderate speed.



100	% DUTY CYCLE

MAXIMUM GATE WEIGHT

#### UNIGATE INVERTER EQUIPPED

2000









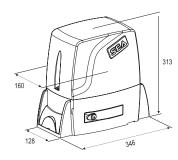
MECHANICAL TWIN

DISC CLUTCH





Saturn can be used on solar applications or add battery backup on request.



ORDER CODE	BOXER2000
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase (230 V)
GATE SPEED	TO 260 MM/SEC (19
MOTOR POWER	700 W
MAX. CYCLES PER HOUR	55*
DUTY CYCLE	100 %*





Accessories page 28

Downee.com.au



### 2000KG

### CONTROLLER



### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25

#### INVERTER SPEED SETTINGS\*



19 M/MIN)

MAX. GATE WEIGHT 2000 KG PINION SIZE Z16 95 MM PINION HEIGHT LIMIT SWITCH MECHANICAL PROTECTION DEGREE IP55 DIMENSIONS (H-W-L) 313, 160, 346 WORKING TEMP. -20°/+55°C



### LEPUS INDUSTRIAL 1500 FAST

MM/SEC GATE SPEED



**GSEA** 

Designed specifically for industrial applications, Lepus 230V version is inverter equipped with a built in UNIGATE controller and oil bath gearbox and mechanical limit switches.





450

MAXIMUM GATE WEIGHT

UNIGATE INVERTER EQUIPPED













ORDER CODE	LEPUS1500
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase 230 V (AC)
GATE SPEED	450 MM/SEC (27 M
MOTOR POWER	650 W
MAX. CYCLES PER HOUR	150*
DUTY CYCLE	100 %*

Downee.com.au

Accessories page 28



### 1500KG

### CONTROLLER

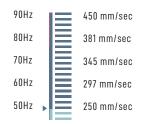


### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25

#### INVERTER SPEED SETTINGS\*



MAX. GATE WEIGHT 1500 KG PINION SIZE Z20 PINION HEIGHT 108 MM //MIN) LIMIT SWITCH MECHANICAL PROTECTION DEGREE IP55 DIMENSIONS (H-W-L) 410, 158, 322 WORKING TEMP. -20°/+55°C

THIS PRODUCT IS

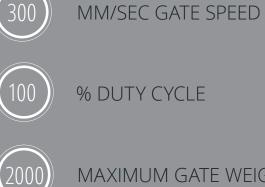


### LEPUS INDUSTRIAL 2000 230V



**GSEA** 

Designed specifically for industrial applications, Lepus 230V version is inverter equipped with a built in UNIGATE controller and oil bath gearbox and mechanical limit switches.



MAXIMUM GATE WEIGHT

UNIGATE INVERTER EQUIPPED









MECHANICAL LIMIT



ORDER CODE	LEPUS2000
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase 230 V (AC)
GATE SPEED	300 MM/SEC (18 M)
MOTOR POWER	800 W
MAX. CYCLES PER HOUR	100*
DUTY CYCLE	100 %*

Downee.com.au

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### 2000KG

### CONTROLLER

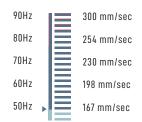


### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25

#### INVERTER SPEED SETTINGS\*



M/MIN)

MAX. GATE WEIGHT	2000 KG
PINION SIZE	Z20
PINION HEIGHT	108 MM
LIMIT SWITCH	MECHANICAL
PROTECTION DEGREE	IP55
DIMENSIONS (H-W-L)	410, 158, 322
WORKING TEMP.	-20°/+55°C



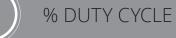
### LEPUS INDUSTRIAL 2000 24V



**GSEA** 

Designed specifically for industrial applications, Lepus 24V version is equipped with a built in 24V USER-1 DG MAXI controller and oil bath gearbox and mechanical limit switches.







MAXIMUM GATE WEIGHT

OIL BATH LUBRICATION



OPTIONAL CARDS FOR BATTERY BACK UP AND SOLAR





MECHANICAL LIMIT

SWITCHES



ORDER CODE	LEPUS200024V
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	24 V (DC)
GATE SPEED	TO 280 MM/SEC (17 M/M
MOTOR POWER	100 W
OPERATIONS PER HOUR	80*
DUTY CYCLE	75 %*

Downee.com.au

Accessories page 28



### CONTROLLER



#### DIGITAL PROGRAMMING

LEPUS INDUSTRIAL 2000 24V is supplied with built in USER-1 control panel

### 2000KG

Details on page 26

- \* Maximum duty cycle based on the first working hour in a test environment
- \*\* Based on a Z13 pinion size. Other pinions available for different speed and weight variations



\*\*\* Other pinion sizes available on request. Z16 Pinion for increase in speed to 350mm/sec, with max weight 1200kg Z20 pinion for increase in speed to 450mm/sec with a max weight 500KG

	MAX. GATE WEIGHT	2000 KG
	PINION SIZE	Z13***
	PINION HEIGHT	92 MM
MIN)**	LIMIT SWITCH	MECHANICAL
	PROTECTION DEGREE	IP55
	DIMENSIONS (H-W-L)	410, 158, 322
	WORKING TEMP.	-20°/+55° C



### BIG 2000

A high speed, heavyduty motor for industrial sliding gates to 2000kg with high-quality stainless steel cover. The hardened, heat-treated mechanicals and oil lubrication system ensure maximum long-term performance and extended life.

All BIG operators feature SEA's own Unigate inverter. This provides maximum speed adjustments and ramp up/ down accuracy and working in unison with the Electrobrake, a safety override device to constantly monitor and control the gate's inertia at all times.





MAXIMUM GATE LENGTH



20





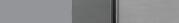








ORDER CODE	BIG2000
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase 230 V (AC)
MOTOR POWER	750 W
GATE SPEED	TO 630 MM/SEC (38
MAX. CYCLES PER HOUR	180*
DUTY CYCLE	100 %*



G 8 GSE/A

\*Based on the first working hour in a testing environment. \*\* Gates 15m+ requires special limit switch



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### 2000KG

### CONTROLLER



### INVERTER EQUIPPED

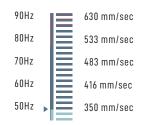
UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25



BASE MOUNT Base for setting in concrete. AAC-BIGBASE

#### **INVERTER SPEED SETTINGS\***



	MAX. GATE WEIGHT	2000 KG
	MAX. GATE LENGTH	20 M**
	PINION SIZE	724
	PINION HEIGHT	155 MM
//MIN).	MAX. TORQUE	70 NM
	LIMIT SWITCH	MECHANICAL-ELECTRONIC
	DIMENSIONS (H-W-L)	585, 480, 300
	WORKING TEMP.	-20°/+55°C

38 M

THIS PRODUCT IS



### BIG 4000

A fast, heavy-duty motor for industrial sliding gates to 4000kg with high-quality stainless steel cover. The hardened, heat-treated mechanicals and oil *lubrication system ensure* maximum long-term performance and extended life.

All BIG operators feature SEA's own Unigate inverter. This provides maximum speed adjustments and ramp up/ down accuracy and working in unison with the Electrobrake, a safety override device to constantly monitor and control the gate's inertia at all times. It stops heavy gates instantly.







4000





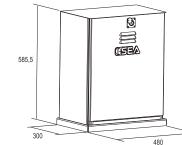
MAXIMUM GATE WEIGHT













G 000 GSEA

Z24 M4 pinion available on request.

ORDER CODE	BIG4000
POWER SUPPLY	SINGLE PHASE
MOTOR VOLTAGE	3-Phase 230 V (AC)
MOTOR POWER	950 W
GATE SPEED	TO 400 MM/SEC (24 M/
MAX. CYCLES PER HOUR	120*
DUTY CYCLE	100 %*

\*Based on the first working hour in a testing environment. \*\* Max gate weight based on use with M6 pinion. Consult with Downee for appropriate pinion based on application.











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### 4000KG

### CONTROLLER



### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25





BASE MOUNT Base for setting in concrete. AAC-BIGBASE

#### INVERTER SPEED SETTINGS\*



	MAX. GATE WEIGHT	4000 KG*
	MAX. GATE LENGTH	N/A
	PINION SIZE	Z12 M6
	PINION HEIGHT	96 MM
/MIN).	MAX. TORQUE	140 NM
	LIMIT SWITCH	MECHANICAL
	DIMENSIONS (H-W-L)	585, 480, 300
	WORKING TEMP.	-20°/+55° C

THIS PRODUCT IS



### BIG 6000

A ultra heavy-duty motor for industrial sliding gates to 6000kg with high-quality stainless steel cover. The hardened, heat-treated mechanicals and oil lubrication system ensure maximum longterm performance and extended life.

160 MM/SEC GATE SPEED



6000 MAXIN

MAXIMUM GATE WEIGHT

BUILT-IN LIMIT SWITCHES









ELECTROBRAKE



ORDER CODE	BIG6000
MOTOR VOLTAGE	3-Phase (400 V)
MOTOR POWER	3000 W
GATE SPEED	TO 160 MM/SEC (
DUTY CYCLE	60 %*



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OSEA

### CONTROLLER



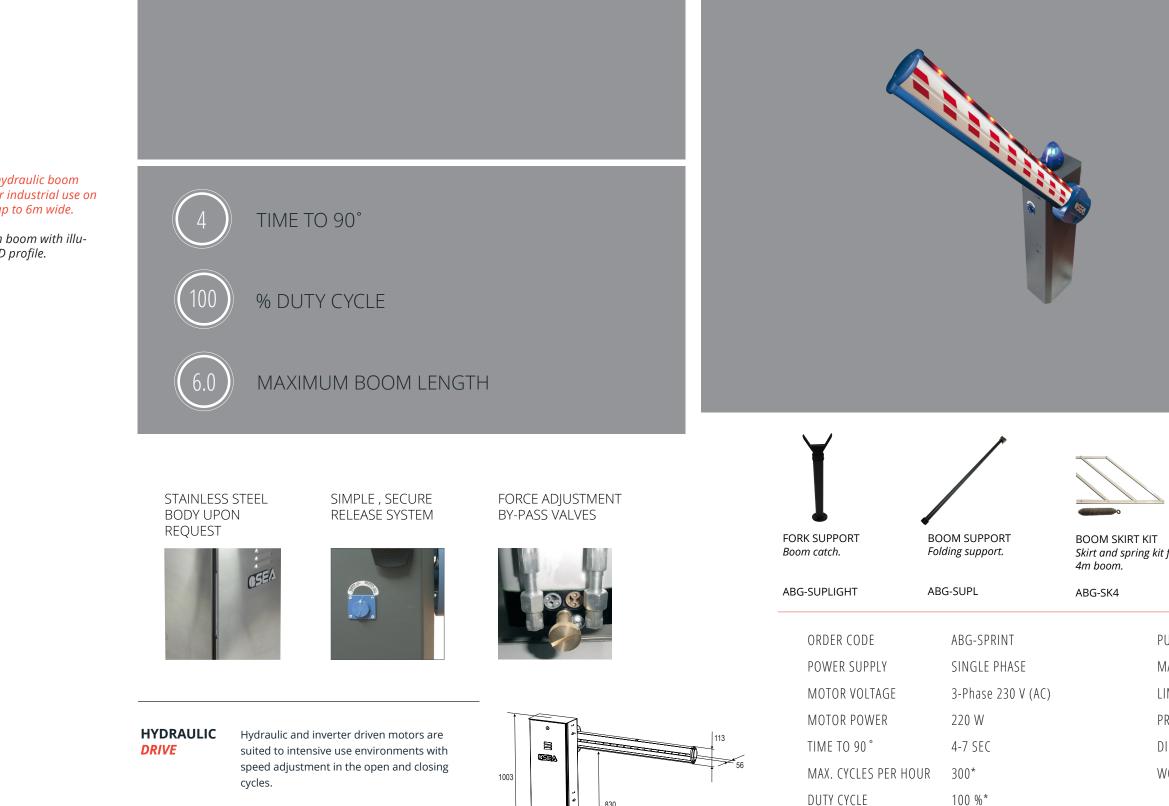
### DIGITAL PROGRAMMING

BIG 6000 is supplied with a GATE-1 digital three-phase control board.

### 6000KG

	MAX. GATE WEIGHT	6000 KG
	MAX. GATE LENGTH	N/A
	PINION SIZE	M6 16 TOOTH
(10 M/MIN).	PINION HEIGHT	151 MM
	MAX. TORQUE	9000 N
	LIMIT SWITCH	MECHANICAL
	DIMENSIONS (H-W-L)	540, 660, 290
	WORKING TEMP.	-20°/+55°C

Product available upon request - lead times will apply.



\* Maximum duty cycle based on the first working hour in a testing environment.

SEA MADE IN ITALY

Downee.com.au

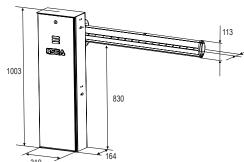
Accessories page 28

Sprint is a hydraulic boom operator for industrial use on driveways up to 6m wide.

Includes 5m boom with illuminated LED profile.

> With no wearing gears due to the hydraulic circuit, they are ideal for high duty cycles. This coupled with the fact the inverter does not have any triac capactiors to increase temperature, it becomes the ideal solution for intensive use.

SPRINT



### CONTROLLER



### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25

Skirt and spring kit for



LED STRIP Light strip for 5m & 8m boom. ABG-LED5 (5m) ABG-LED8 (8m)



SPRINT BOOM 5m & 6m boom with spring, rubber & LED profile. ABG-LIGHT5 (5m) ABG-LIGHT6 (6m)

PUMP CAPACITY	1.5 L
MAX. BOOM LENGTH	6 M
LIMIT SWITCH	MECHANICAL
PROTECTION DEGREE	IP55
DIMENSIONS (H-W-L)	1003, 164, 310
WORKING TEMP.	-20°/+55°C





SEA MADE IN ITALY

VELA INDUSTRIAL

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### CONTROLLER



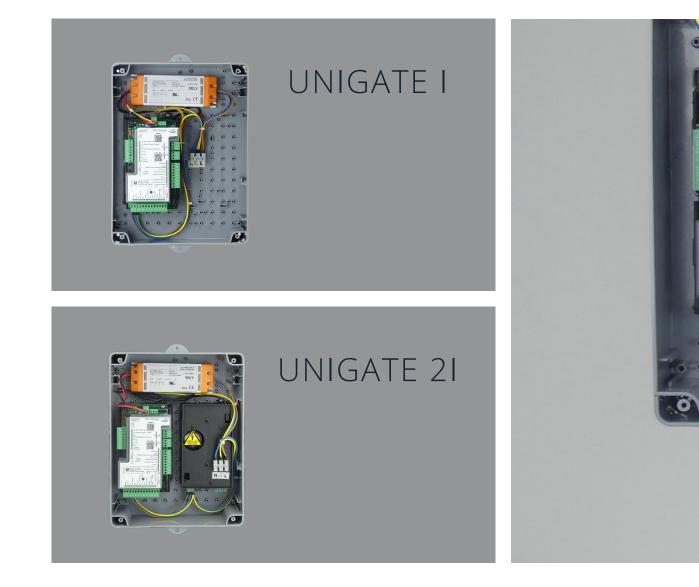
### INVERTER EQUIPPED

UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to control board via USB cable.

Details on page 25

PUMP CAPACITY	2.0 L
MAX. BOOM LENGTH	7.5 M
LIMIT SWITCH	MECHANICAL
PROTECTION DEGREE	IP55
DIMENSIONS (H-W-L)	1120, 213, 400
WORKING TEMP.	-20°/+55°C





### UNIGATE WITH INVERTER TECHNOLOGY

Designed, engineered and manufactured by SEA specifically for gate automation applications, and minimise electronic "noise". Features completely variable speed control via frequency, to ensure motor torque is maintained through the speed range, including motor slow down. Motor heat is kept to a minimum due to Inverter technology. Motor direction can be changed by parameter settings, no need to rewire motor phases. UNIGATE uses a separate inverter power module and control board to achieve optimum heat management of power module components. The Inverter power module is connected to the control board via USB cable. The Universal Controller for All Applications

#### UNIVERSAL POWER

11111111

0 0 0 0 0

One Unilogic controller features a built-in potentiometer. This allows Unigate to work across the entire range of power options.

• 24Vdc

- 230Vac
- 3-Phase inverter
- 36Vdc Brushless

With the digital controller providing a platform to work with all SEA operators including swing, slide and boom gates.

Manages one, two or up to FOUR operators.

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Accessories page 28



### FEATURES

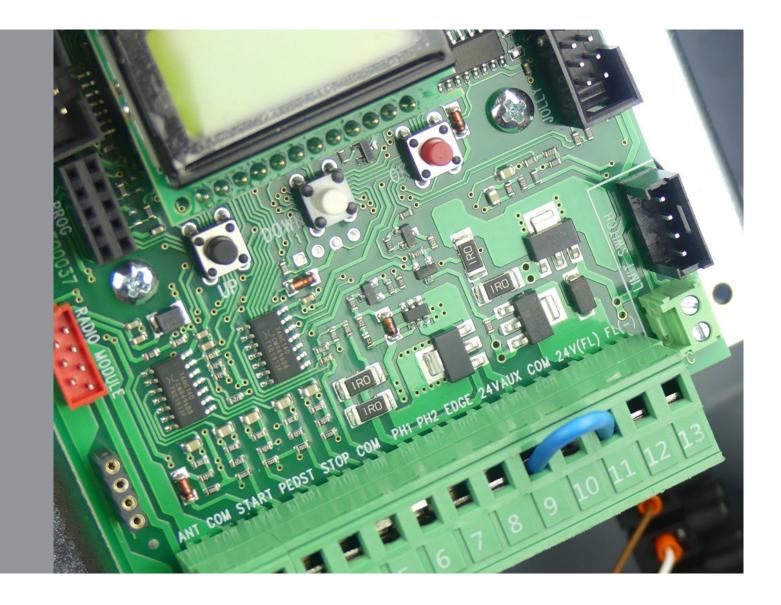
• Large 16 character display. Backlit to be visible from any angle.

- Built-in 24hr timer with back-up battery.
- Two programmable relays
- Manage up to 4 limit switches
- 24V auxiliary management
- Management of 2 dry contacts
- External power supply via switching
- Open-Close-Stop with separate inputs

### **BI-DIRECTIONAL**

Manages mono and bi-directional encoders to for two-way communication with Eagle Tranciever remotes.





### DIGITAL CONTROLLER

*The USER-1 control panel is 24V Digital control unit for sliding gate operators. With the use of* the JOLLY-3 programmer, the set up of sliding gate automation is made easy. The USER-2 control panel is used to operate single and double leaf swing gates. Again the use of the JOLLY-3 programming makes the install straight forward. Simple speed, force and slowdown adjustment of both USER control boards allows for flexibility on site. With the option of battery backup or solar this control panel allows versatility in different applications.

#### USER-1

• Prepared for Master/Slave function

- Limit switch connector
- More resistance components for intensive use
- Max capacity 300 mA transformer 24V accessories
- Management of photocells 10K
- Adjustable slowdown in open and close
- Adjustable leaf delay for open and close
- Adjustable pedestrian opening
- 24V LED warning lamp
- Built-in radio decoding for Plug-In Receiver
- Adjustable amperometic-type inversion on obstacle
- Photocells self-test
- Balanced or standard safety edge management
- Motor and limit switch inversion (right /left mounting)
- Automatic close setting
- Start in pause setting
- Courtesy light setting up to 4 minutes
- Cycle counter

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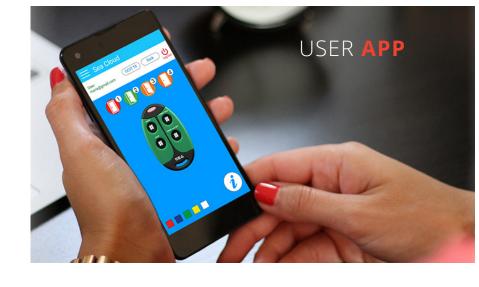
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#### USER-2

- Simple programming
- Compatible with Jolly 3
- Adjustable slowdown in open and close
- Separate speed settings for each leaf
- Leaf delay for open and close
- Adjustable pedestrian opening
- 24V LED warning lamp
- Cycle counter
- Settable photocell inputs and self-test
- Working times self-learning
- Built-in radio decoding for Plug-in Receiver
- Courtesy light setting up to 4 minutes
- Prepared for encoder management
- Adjustable amperometic-type inversion on obstacle
  Balanced or standard safety edge management
- Low power consumption in stand-by
- Optional external module for traffic light management
- Max capacity 250 mA transformer 24V accessories
- Dead-man, automatic, security, step-by-step type-1, step-by-step type-2, semi-automatic 1, semi-automatic 2

### COMING SOON

INSTALLER APP



### status of a gate. No mothly fee.

APP to open and check the

USER APP

SEA **CLOUD** 

Remote management system allows you to connect remotely to site via SEA Cloud control units. View an operators display, and operate it remotely as if you were on site.

Available on Android or iPhone to operate garage doors, gates and boom gates. Easy connection to your home through WiFi or LAN cable.

### **REMOTE PROGRAMMING**

APP for managing SEA automation systems wherever you are via smartphone, tablet or computer.

Program remotely and receive diagnostics by email.

Overview of events and access with timetable, like an access control.

Periodical maintenance reminders based on cycles.

Assign remote control to several end-users in order to:

- View status of a gate
- Change pause time Change slowdown speeds

Downee.com.au





COCCINELLA FM FM frequency & oversize aerial provide long distance signal. Use with FM Receiver. AAC-LONGRANGE4



COCCINELLA 2 2-channel remote with LED signal light and silicone buttons.

AAC-UNIROLL-2



**COCCINELLA** 4 4-channel remote with LED signal light and silicone buttons.

AAC-UNIROLL-4



EAGLE Bi-directional 4-channel remote with metal edges. Two LED functions. Up to 100m range. AAC-EAGLE-4

### ACCESSORIES & **ELECTRONICS**

USER-2 24V DG SW

MASTER-SLAVE KIT

in Master/Slave mode.

BIPART

USER-2



AXY CARD READER 125 KHz with poly cover & resinated GAND Protocol 26/30 bit. Includes 1m cable. AAC-AXY



READ Universal swipe card reader.

AAC-READ



SWIPE CARDS REWRITE CARDS Packs of 10. Packs of 10.

AAC-CARD AAC-CARDRW



UNISWIPE *Control module for proximity* readers.

AAC-UNISWIPE



FLIP BATTERY PHOTOCELLS Battery-powered transmitter with power-saving motion sensor. Up to 30m range. ACC-FLIPBAT



AAC-ANT-SEA 433 Mhz antenna includes swivel base and cable.

AAC-ANTSEA



USER-1 24V DG MAXI Controller with built in transformer housed in an external enclosure for 24V slide gate operators.

USER-1



ESUN Q Add-on card for battery backup option & solar panel.

AAC-ESUNQ (batteries) AAC-ESUNQ-PLUS (solar)



PLUG-IN RECEIVER 2-channel universal receiver with 2nd channel programmable in bistable and/or timed mode.

AAC-RECUNI-PLUG



UNIVERSAL RECEIVER 2-channel universal receiver with 2nd channel programmable in bistable and/or timed mode.

AAC-RECUNI



ROCK WIRELESS KEYPAD Long-range (up to 70m) 2-channel wireless keypad. 433 MHz. AAC-ROCK

Downee.com.au

12V VERTICAL LOCK

AAC-VERLOCK12

hardware.

Locks are recommended to avoid

wind damage on 2m+ gates or



EYES 2 PHOTOCELLS Anti-vandal metal cover and body. Up to 30m range. 12-24V power. AAC-EYES2



FLIP PHOTOCELLS Up to 15m range. Uses 12-24V Vac-Dc power. 180° adjustable.

AAC-FLIP



24V VERTICAL LOCK Locks are recommended to avoid wind damage on 2m+ gates or hardware.





AAC-REFLEX

Resistance for safety.

**REFLEX PHOTOCELLS** 

Reflective photocell up to

10m. Adjustable sensitivity. 10K







#### Common spare parts also available.



Controller with built in transformer housed in an external enclosure for 24V swing gate operators.

UNIGATE-I In-built timer plus inverter for use with one motor. Includes cover.

UNIGATE-I



UNIGATE-2I In-built timer plus twin inverters for use with two motors. Includes cover.

UNIGATE-2I





Connects 2 controllers to operate Suits USER-1 control board.

CLOUD BOARD Manage operators remotely via cloud board. Coming soon! AAC-SEACLOUD





JOLLY 3 Programming unit for Unigate & DG controllers.

AAC-JOLLY3



SIGNAL BOX External 4-channel universal receiver. IP55.

AAC-RECUNI-IP





SIGNAL BOX FM

Compatible with Coccinella FM remote. Range to 300m subject to environment. Features 'Stay open' latching function. AAC-RECLONG

# 01

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### Downee