

# ELECTROCHLOR

## Mineral chlorinator



- Backlit LCD screen with temperature display
- Energy-saving, intelligent power pack
- Self-cleaning chlorinator cell
- Low salt alarm and flow protection
- Variable speed pump and LED light control
- Dual timer controlled power outlets
- Optional valve actuator control



## Simplifying Pool Ownership

Waterco's Electrochlor Mineral Chlorinator makes your pool smarter by automatically taking care of sanitisation, filtration and auxiliary equipment so you don't have to! This one device will monitor and display everything you need to know about your pool in real time.

**Easy-to-read display screen** : a snapshot of you pool's temperature and everything you need to know about your pool's current functions are clearly displayed in one place.

**Variable speed pump compatibility** : automatically changes the speed of your Waterco variable speed pump at the desired cycle if required.

**Dual-pump control** : control another pump in conjunction with a variable speed pump simultaneously, which means you can operate your in-floor pool cleaning pump or pressure pool cleaner at the same time of your main pool pump.

**Actuator control** : connect a valve actuator to to divert water flow and activate the correct speed on a variable speed pump for your pool's water feature or for in-floor pool cleaning.

**Easily manage auxiliary equipment** : switch on and off lights, ozone generators and other auxiliary equipment using a secondary General Purpose Outlet (GPO) which can be activated independently or set in conjunction with other pool equipment.

**No water flow detection** : Electrochlor is smart enough to detect if there is no flow to the pool and adjusts the speed of a variable speed pump to overcome low water flow. If adequate water flow is not restored, the pump will switch off to prevent potential damage to your pool equipment.

**Low chlorine mode** : low chlorine production can be easily activated via a pool cover or a pool controller by sending a signal to the chlorinator.

**Built-in alarm system** : Electrochlor takes the guesswork out of maintaining pool equipment by displaying alarm messages in the event of a malfunction.

**Quick trouble shooting** : a diagnostic menu helps service technicians quickly identify potential issues.







## Chlorination

A chlorine generator's main function is to produce chlorine for the pool, which is essential in preventing the recurrence of common strains of algae and bacteria. The chlorine then turns back into salt and the system continues as long as the generator is functioning properly.

This simple yet sophisticated pool care solution consists of a Power Pack (power supply) and an electrolytic salt cell where the chlorine is produced.

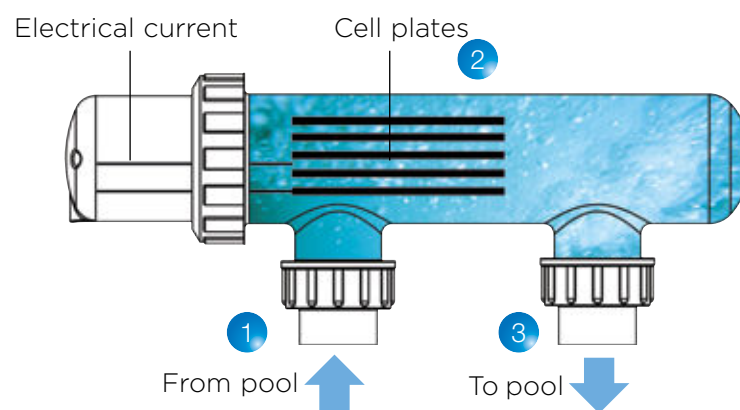
- **Electrochlor Power Pack** – automatically monitors chlorine production by regulating the amount of electrical energy supplied to the Electrolytic Salt Cell
- **Electrolytic Salt Cell** – consists of a series of titanium electrodes with opposite charges. Waterco's clear salt cell housing, is constructed using clear UV stabilised acrylic, and allows you to visually inspect the salt cell plates

## Self-Cleaning Cell

The Electrochlor Power Pack powers up the salt cell (anode and cathode) and holds an electrical potential difference between them for a designated period of time. This difference is reversed after that period of time has expired and then the anode becomes the cathode and the cathode becomes the anode.

The reversing of polarity or electrical potential difference will then start to remove any calcium build-up, which may have been deposited onto the cathode.

This continuous reversing of polarity will keep the cell clean from calcium deposits during its operation, providing the chemical balance and flow of the pool water thru the cell is maintained within normal parameters.



1. Pool water containing Mineral Crystals / pool salt.
2. Mineral Crystals / pool salt split into basic components, one of them chlorine gas.
3. Chlorine gas dissolves in pool water, residual level keeps the water sanitised and safe for the swimmer.



## Electrochlor Mineral Power Pack

Automatically monitors chlorine production by regulating the amount of electrical energy supplied to the Electrolytic Salt Cell



## Energy Saving

Electrochlor uses the latest Switch Mode Power Technology to increase energy efficiency by over 50%, significantly reducing power consumption. Electrochlor draws less current and this translates to high power conversion and less energy wastage, without compromising chlorine output.



## Electrolytic Salt Cell

Consists of a series of titanium electrodes with opposite charges. Waterco's clear salt cell housing, is constructed using clear UV stabilised acrylic, and allows you to visually inspect the salt cell plates.

Large lock ring for easy access.

Unobtrusive cradle design to minimise calcium build up.

Titanium Electrolytic Cell - serial parallel design that enhances chlorine production, whilst requiring less energy.



Hydraulic efficient design.

50mm connections for quick connection to pipe work.

Durable UV stabilised engineering plastic cell housing.





## Special features of Waterco's Electrochlor Mineral Chlorinator



### **Battery backup power pack**

Automatically saves your settings in the event of a power outage.



### **Pump protection**

In case water flow is not detected, Electrochlor protects the pump by shutting it down, and then automatically displays the corresponding alarm.



### **Salt alarms**

If the salt level in the pool water is too low or too high, Electrochlor automatically reduces the output and displays the corresponding alarm. A digital time stamp of high salt levels is also recorded. Electrochlor also monitors the pool's temperature to eliminate false low salt level readings often attributed to low pool temperatures.



### **Dual general power outlets (GPO)**

Two GPOs are included – one for the pool pump and another for a pool light or auxiliary device that needs to be operated under a timer.

Note: Please refer to Electrochlor's technical specifications for the maximum allowable load.



### **Variable speed pump control**

Easily control a variable speed pump and switch it on and off by connecting it to Electrochlor via a communication cable.

Note: This feature is only enable when a Waterco variable speed pump is installed.



### **Control two pumps**

When a Waterco variable speed pump is connected to Electrochlor with a pump control cable, the pump can also be linked to an independent dual general power outlet such as a pressure cleaner pump or in-floor cleaning pump.



### **Pool water temperature display**

A temperature sensor displays pool water temperature on an LCD screen.





#### **Super chlorination function**

Chlorine production is raised to 100% during a 24-hour period to super-chlorinate the pool, then returns to its pre-set operating condition once completed.



#### **Spa mode/low chlorine output**

This mode reduces chlorine production to 10%, whilst active.



#### **Interlocking functions**

Program, activate and simultaneously control multiple pool equipment such as the control valve, and determine the minimum required water flow for ancillary functions.



#### **Self-cleaning electrolytic salt cell**

Reverses the polarity of the voltage to clean calcium build-up off its electrodes. This extends Electrochlor's lifespan and ensures it operates at maximum efficiency.



#### **Four independent timers**

Multiple timers allow you to control the pump, pool light and auxiliary equipment conveniently from one compact unit.



#### **Low-flow condition**

In the event of a "no-flow" condition, Electrochlor will compensate by increasing the pump speed. If the "no-flow" condition is resolved, it will maintain the new speed to keep the pool pump running.

Note: This feature is only enabled when a Waterco variable speed pump is installed.



#### **Diagnostic menu**

A comprehensive diagnostic screen allows the pool technician or pool owner to quickly assess Electrochlor's operational status at any time.



## Mineral Swimming Pools



Electrochlor was specially designed to work in synergy with Waterco's Mineral Crystals to transform your pool into a therapeutic oasis.

### **Magnesium enriched water**

Magnesium has been recognised by medical professionals and consumers all over the world for its ability to alleviate a variety of ailments relating to the skin, muscles and nervous system.

Absorbing Magnesium, directly through your skin as you swim, provides a range of lifestyle benefits, including:

- Reduced muscle aches, pains, cramping and spasms
- Healthy skin and reduced outbreaks of eczema and psoriasis

### **Mineral Crystals**

Mineral Crystals not only improves your pool water with a blend of naturally occurring minerals but also moisturises your skin as you swim. In fact, the common effects associated with swimming in a chlorinated pool, including red eyes and dry skin, are significantly relieved with Mineral Crystals. Its gentle formulation that has little to no taste and can be used in any type of pool.

‘Transform your pool into  
a therapeutic oasis,’





## Commonly Asked Questions

### Is there a difference between 'Salt Chlorinator' chlorine and 'normal' chlorine?

A salt chlorinator makes chlorine the same way a chlorine factory does. The difference is that it is manufactured in your pool. Liquid chlorine is approximately 12.5% pure, whereas Electrochlor's chlorine is 100% pure.

### Will I ever need to add standard pool chlorine again?

From time to time it may become necessary to add some chlorine to the pool. This may be due to heavy rain or if the chlorine level needs to be shocked back up.

### Does the Mineral Crystals / salt damage pool equipment?

No. Low levels of salt have relatively insignificant corrosive effects on pool fittings and equipment.

### How do I get started?

It's easy! After installing your salt chlorinator, you simply add the recommended amount of salt to your pool and choose your desired chlorine level.

### How much salt will I need?

1 kg of salt in 1,000 litres of water raises the salt level by 1,000ppm. Therefore, 420 kg of salt will raise a 70,000 litres pool from 0 ppm to 6,000 ppm.

### What type of salt should I use?

High purity salt, it is important that the salt does not contain additives. Any common salt (like table salt) usually has an additive that may have staining properties.

## Salinity Level – Operation:

TDS Levels (ppm)

Minimum = 4,000 Optimum = 5,500 Maximum = 6,000

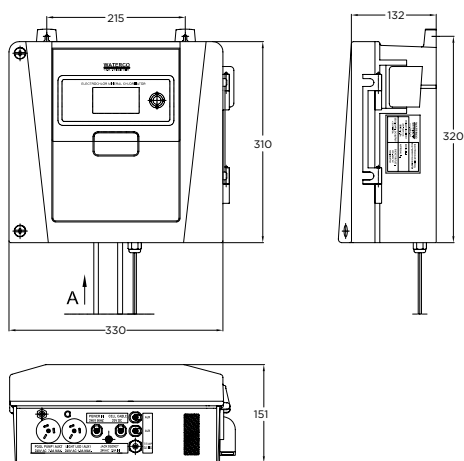
Note: Low salinity level will reduce the life of the chlorinator cell and lead to low chlorine production

## Three Year Warranty:

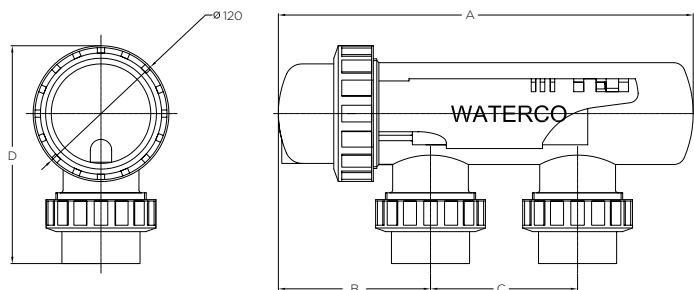
Electrochlor	3 years
Chlorinator cell	3 years
Power pack	3 years
Commercial Installations	1 year

\*Please refer to Waterco's Warranty terms and conditions.

## Power Pack Dimensions



## Chlorinator Cell Dimensions



Model	A (mm)	B (mm)	C (mm)	D (mm)
20 g/h, 25 g/h, 30 g/h	367	134.5	130.0	192.5

## Technical Specifications

Model	Chlorine Production (g/hr)	Max Pool Capacity (L) Climate	
		Temperate	Tropical
Electrochlor Mineral 2000	20	60,000	48,000
Electrochlor Mineral 2500	25	80,000	60,000
Electrochlor Mineral 3000	30	100,000	72,000

	2000	2500	3000
Primary Input (Volts) / Frequency (Hz)	170-264V/ 47 - 64 Hz	170-264V/ 47 - 64 Hz	170-264V/ 47 - 64 Hz
Input Power (W)	105	115	130
Output Current (A)	5.4 (DC)	5.8 (DC)	6.0 (DC)
Maximum Total Current (A)	10	10	10
Pump Outlet Maximum (A)	8	8	8
Cell Voltage (V)	21	21	21
Degree of Protection	IP23	IP23	IP23

These chlorinators are approved and conform to AS3136 Swimming Pool Equipment, as a prescribed article under Australian Registration. These Chlorinators conform to the Australian Electromagnetic Compatibility Standard marked by the C-tick.

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