

Chlorine Dioxide Generator



“LOTUS AIR”

The LOTUS AIR system produces, doses and controls Chlorine Dioxide for water disinfection. Chlorine Dioxide is produced from diluted base chemicals: acid-chlorite process by Hydrochloric Acid (HCl 9%) and Sodium Chlorite (NaClO₂ 7,5%). Chlorine dioxide produced by LOTUS AIR is stocked into a tank and then dosed proportionally to the request. Injection is **multi-point** and dosing is **proportional** to the volumetric flow rate.

Chlorine dioxide is produced in a **BATCH process**.
The reaction process takes place at **ATMOSPHERIC PRESSURE**.

An active carbon filter prevents from potential exhalations.

LOTUS AIR is designed so that the reaction to produce chlorine dioxide takes place in a reaction chamber.

A **multifunction valve** guarantees the safety of the process.

LOTUS AIR system has got:

- LOTUS AIR control instrument;
- reaction chamber at 4 filling levels;
- storage tank at 2 filling levels;
- HCl (red) and NaClO₂ (blue) metering pumps;
- pump for Chlorine Dioxide;
- Chlorine Dioxide solenoid valve;
- water solenoid valve;
- carbon filter;
- 2 LASP4 (LASP4/V40) suction lances with level probe and coloured nuts. For 30 litres tanks;
- 1/2" injection valve;
- MFKT/V multifunction valve.

GAS SENSOR OPTION

LOTUS AIR with gas sensor detection.

ADVANTAGES

- › Reaction at ambient pressure
- › Injection multi-point
- › No emission
- › Diluted chemicals

FUNCTIONS

- › BATCH chlorine dioxide production
- › Multi-point and proportional dosing
- › Alarms: products, water, emptying
- › Water meter input
- › Stand-by input
- › Real time production data
- › Pumps and SEFL flow sensors monitoring
- › Service due date
- › ERMES communication
- › ClO₂ concentration in water measurement and control
- › mA output

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- › ClO₂ concentration: 2 gr/l (2%)
- › HCl (red), NaClO₂ (blue) and ClO₂ (grey) metering pumps
- › MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- › Double chamber: reaction and storage enclosure or fiberglass (Lotus Air 30/60)
- › IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- › Wheel control for easy programming
- › Working temperature: 0/45°C (32/110°F)



LOTUS AIR 10



LOTUS AIR 30/60



Chlorine Dioxide Generator

	LOTUS AIR 10	LOTUS AIR 30	LOTUS AIR 60
ClO2 max capacity (g/h)	10 g/h	30 g/h	60 g/h
ClO2 max capacity (g/day)*	240 g/day	720 g/day	1440 g/day
Max chemicals consumption (l/h)	0,250 l/h (HCl) 0,250 l/h (NaClO2)	0,750 l/h (HCl) 0,750 l/h (NaClO2)	1,5 l/h (HCl) 1,5 l/h (NaClO2)
Dilution water consumption (l/h)	5 l/h	15 l/h	30 l/h
Max pressure (feed water)	2 bar	3 bar	3 bar
Max pressure ClO2 pump (bar)	8 bar	5 bar	5 bar
Concentration (g/l)	2 g/l		
Power supply	230 VAC (190-265 VAC) 115 VAC (90-135 VAC)		
Average power consumption (W/h)	60		

* Max capacity (gr/day) is referred to a 100% capacity / 24h.

Optional accessories

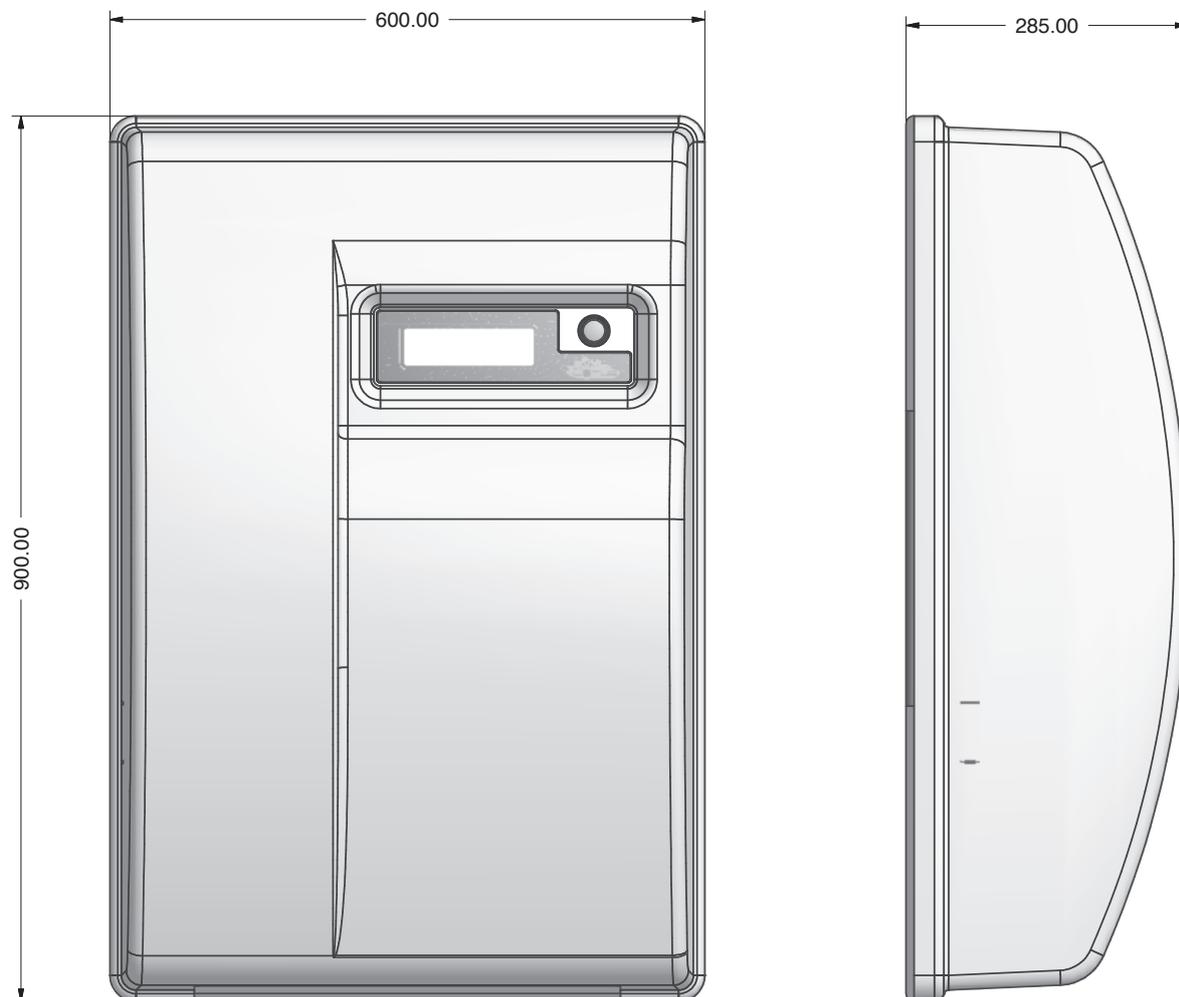
- Gas sensor
- Static mixer

Chlorine Dioxide Generator

LOTUS AIR10 Dimensions

[mm].

Weight: 55 kg

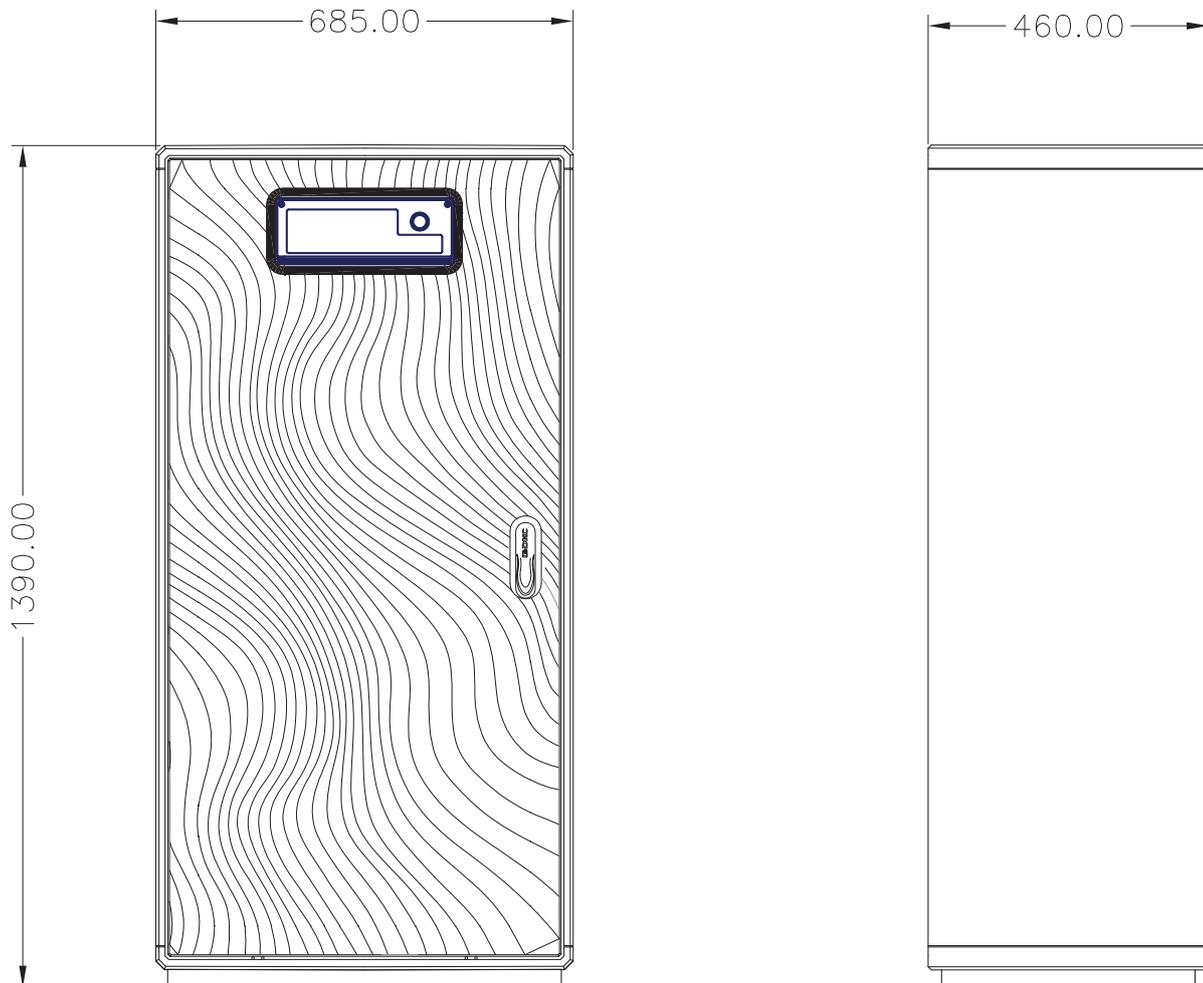


Chlorine Dioxide Generator

Dimensions LOTUS AIR 30/60

[mm].

Weight: 85 kg



Chlorine Dioxide Generator



LOTUS AIR 10 with probe measure



LOTUS AIR 30/60 with probe measure



“LOTUS AIR” with probe measure

The LOTUS AIR with probe measure system produces, doses and controls Chlorine Dioxide for water disinfection.

It is equipped with a ClO₂ probe (SCL17 or SCL2) or an ORP probe (ERH), a probe holder and a filter.

Chlorine Dioxide is produced from diluted base chemicals: acid-chlorite process by Hydrochloric Acid (HCl 9%) and Sodium Chlorite (NaClO₂ 7,5%). Chlorine dioxide produced by LOTUS AIR is stocked into a tank and then dosed proportionally to the request.

Injection is **multi-point** and dosing is **proportional** to the volumetric flow rate.

Chlorine dioxide is produced in a **BATCH process**.

The reaction process takes place at **ATMOSPHERIC PRESSURE**.

An active carbon filter prevents from potential exhalations.

LOTUS AIR is designed so that the reaction to produce chlorine dioxide takes place in a reaction chamber.

A **multifunction valve** guarantees the safety of the process.

LOTUS AIR with probe measure system has got:

- LOTUS AIR control instrument;
- reaction chamber at 4 filling levels;
- storage tank at 2 filling levels;
- HCl (red) and NaClO₂ (blue) metering pumps;
- pump for Chlorine Dioxide;
- Chlorine Dioxide solenoid valve;
- water solenoid valve;
- carbon filter;
- 2 LASP4 (LASP4/V40) suction lances with level probe and coloured nuts. For 30 litres tanks;
- 1/2" injection valve;
- MFKT/V multifunction valve.
- stainless steel filter
- measuring probe (ERH or SCL17 or SCL2) with probe holder

GAS SENSOR OPTION

LOTUS AIR with gas sensor detection.

ADVANTAGES

- › Reaction at ambient pressure
- › Injection multi-point
- › No emission
- › Diluted chemicals

measurement and control

- › mA output

FEATURES

- › ClO₂ concentration: 2 gr/l (2%)
- › HCl (red), NaClO₂ (blue) and ClO₂ (grey) metering pumps
- › MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- › Double chamber: reaction and storage
- › ASA (Acrylonitrile Styrene Acrylate) enclosure or fiberglass (Lotus Air 30/60)
- › IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- › Wheel control for easy programming
- › Working temperature: 0/45°C (32/110°F)

FUNCTIONS

- › BATCH chlorine dioxide production
- › Multi-point and proportional dosing
- › Alarms: products, water, emptying
- › Water meter input
- › Stand-by input
- › ClO₂ probe reading (Lotus AIR SCL2 - Lotus AIR SCL17)
- › Temperature probe reading (probe and accessories not included)
- › mV probe reading (Lotus AIR ERH)
- › Real time production data
- › Pumps and SEFL flow sensors monitoring
- › Service due date
- › ERMES communication
- › ClO₂ concentration in water

Chlorine Dioxide Generator

Lotus AIR ERH

With ORP probe "ERH".

Lotus AIR SCL2

With Chlorine Dioxide probe "SCL2" (cold water).

Lotus AIR SCL17

With Chlorine Dioxide probe "SCL17" (hot water).

Features	Models	LOTUS AIR 10 ERH	LOTUS AIR 30 ERH	LOTUS AIR 60 ERH
		LOTUS AIR 10 SCL2 LOTUS AIR 10 SCL17	LOTUS AIR 30 SCL2 LOTUS AIR 30 SCL17	LOTUS AIR 60 SCL2 LOTUS AIR 60 SCL17
ClO ₂ max capacity (g/h)		10 g/h	30 g/h	60 g/h
ClO ₂ max capacity (g/day)*		240 g/die	720 g/die	1440 g/die
Max chemicals consumption (l/h)		0,250 l/h (HCl) 0,250 l/h (NaClO ₂)	0,750 l/h (HCl) 0,750 l/h (NaClO ₂)	1,5 l/h (HCl) 1,5 l/h (NaClO ₂)
Dilution water consumption (l/h)		5 l/h	15 l/h	30 l/h
Max pressure (feed water)		2 bar	3 bar	3 bar
Max pressure ClO ₂ pump (bar)		8 bar	5 bar	5 bar
Concentration (g/l)		2 g/l		
Power supply		230 VAC (190-265 VAC) 115 VAC (90-135 VAC)		
Average power consumption (W/h)		60		

* Max capacity (gr/day) is referred to a 100% capacity / 24h.

Optional accessories

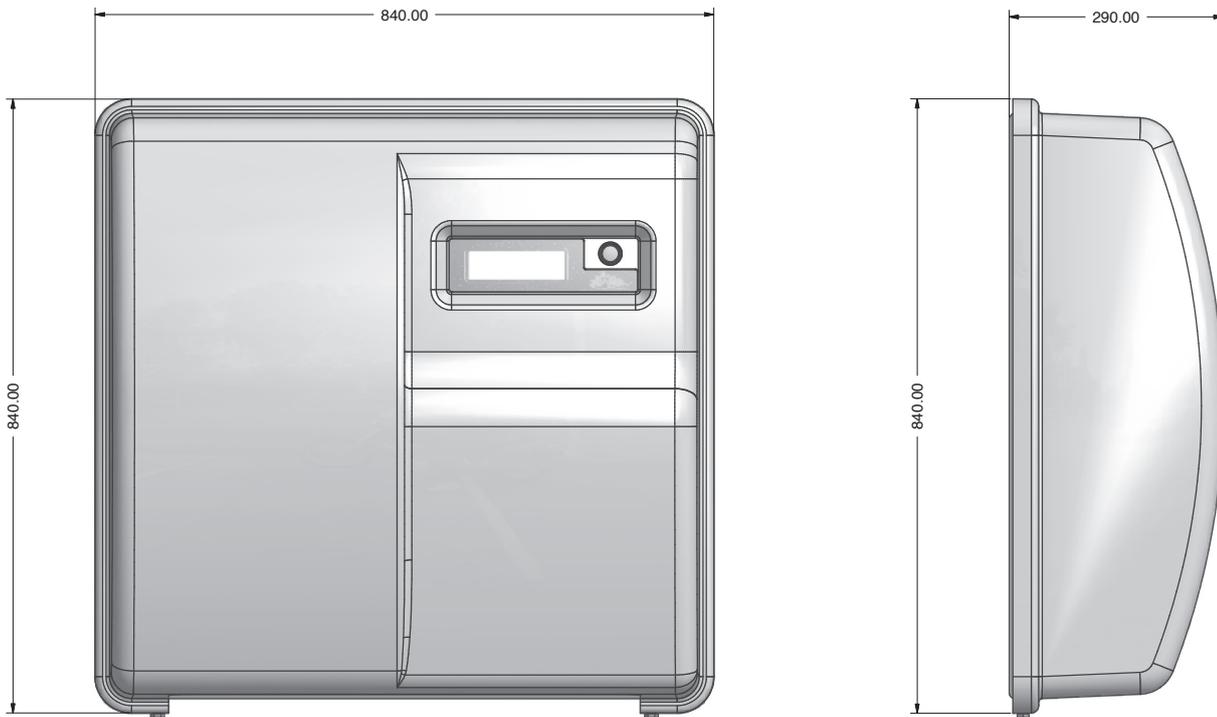
- Gas sensor
- Static mixer

Chlorine Dioxide Generator

Dimensions LOTUS AIR10 WITH PROBE MEASURE

mm.

Weight: 60 kg



LOTUS AIR

Chlorine Dioxide Generator

Dimensions LOTUS AIR30/60 WITH PROBE MEASURE

mm.

Weight: 90 kg

