LOTUS AIR

Chlorine Dioxide Generator

Data Sheet

LOTUS AIR 10

LOTUS AIR 30/60

"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 multifunciton 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
- Service due date
- ERMES communication
- ClO2 concentration in water measurement and control
- mA output

CARATTERISTICHE

- 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)

Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Fax +39 0746 2284 2 - http://www.emec.it

LOTUS AIR

Chlorine Dioxide Generator

Data Sheet

	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/die	720 g/die	1440 g/die
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)		
Maximum power consumption (W)	60		

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

Optional accessories

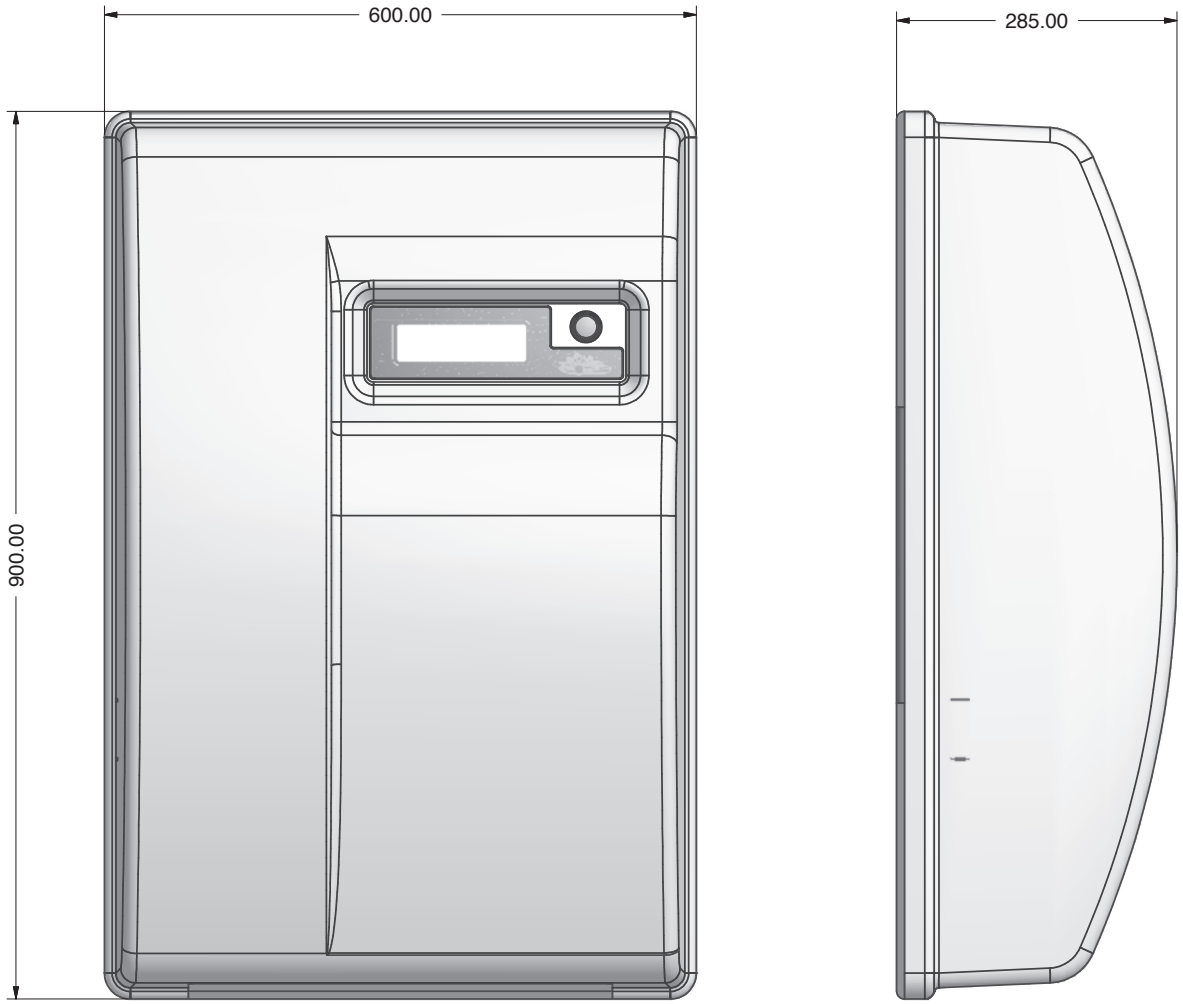
- Gas sensor
- Static mixer

Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Fax +39 0746 2284 2 - http://www.emec.it

LOTUS AIR10 Dimensions

[mm].

Weight: 55 kg



Dimensions LOTUS AIR 30/60

[mm].

Weight: 85 kg

LOTUS AIR

Data Sheet

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 ClO_2 probe (SCL17 or SCL2) or an ORP probe (ERH), a porbe 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 multifunciton 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

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
- Service due date
- ERMES communication
- ClO2 concentration in water 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)

Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Fax +39 0746 2284 2 - http://www.emec.it

LOTUS AIR

Chlorine Dioxide Generator

Data Sheet

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 10 SCL2 LOTUS AIR 10 SCL17**	**LOTUS AIR 30 ERH LOTUS AIR 30 SCL2 LOTUS AIR 30 SCL17**	**LOTUS AIR 60 ERH LOTUS AIR 60 SCL2 LOTUS AIR 60 SCL17**
ClO2 max capacity (g/h)	10 g/h	30 g/h	60 g/h
ClO2 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 (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)		
Maximum power consumption (W)	60		

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

Optional accessories

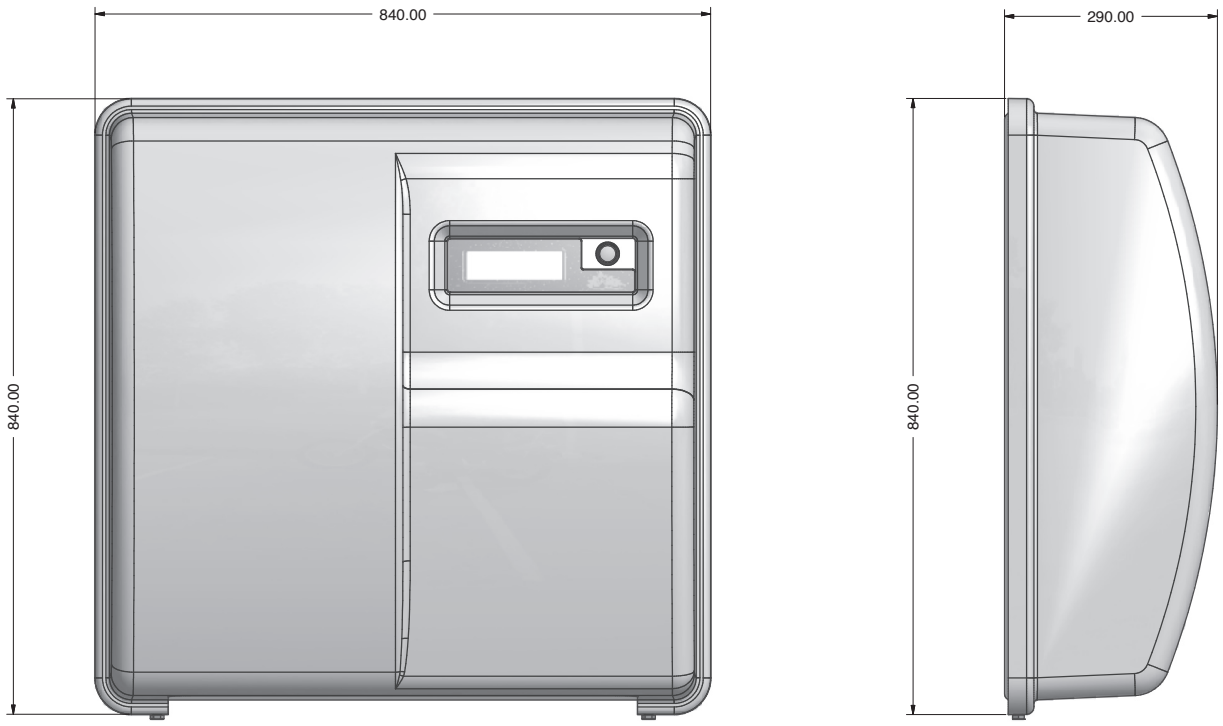
- Gas sensor
- Static mixer

Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Fax +39 0746 2284 2 - http://www.emec.it

Dimensions LOTUS AIR10 WITH PROBE MEASURE

mm.

Weight: 60 kg



Via Donatori di sangue, 1 - 02100 Rieti - Italy
Tel. +39 0746 2284 1 - Fax +39 0746 2284 2 - http://www.emec.it

Dimensions LOTUS AIR30/60 WITH PROBE MEASURE

mm.

Weight: 90 kg