

# EASYZON D

**SAFE, reliable & efficient  
on-site generation of chlorine dioxide**

**EASYZON D 5, 10, 20, 40 g/h ClO<sub>2</sub>**

**For Legionella Control in hospitals, nursing homes, hotels, commercial buildings.**

**Food & beverage CIP disinfection,  
Cooling tower biocide treatment,  
food washing & process water.**



## Function

EASYZON D - range of systems provide a batch supply of chlorine dioxide solution for on-demand chemical dosing & disinfection applications, generated from chlorite/acid chemical reagent process.

The EASYZON D automatically draws and mixes precise volumetrically measured amounts of acid and chlorite, under vacuum, from respective chemical storage containers. The reacted chlorine dioxide solution is homogenised and diluted with a volumetrically controlled flow of cold water prior to dispensing into the integral storage tank under atmospheric pressure.

Retention time of the chlorite/acid mixing is continuously controlled within the generator and automatically diluted and dispensed into the product batch tank, the level of which is governed by electronic level sensors.

The EASYZON D accepts an external pulse water signal input to conventionally record site water usage in combination with the integrated volumetric usage record of chemical reagents.

## Benefits

- Batch preparation and dosing apparatus all fully contained within a single, lockable unit.
- Safe handling of chemical reagents drawn from containers under vacuum.
- Vacuum process eliminates need of chemical reagent dosing pumps and associated loss of prime and pump head maintenance.
- Reagent consumption precisely governed by volumetric flow sensors optimising chemical usage.
- A second output dosing pump can be connected externally for multi-point dosing.
- Simple and low maintenance frequency
- Low whole life costs

## Functions

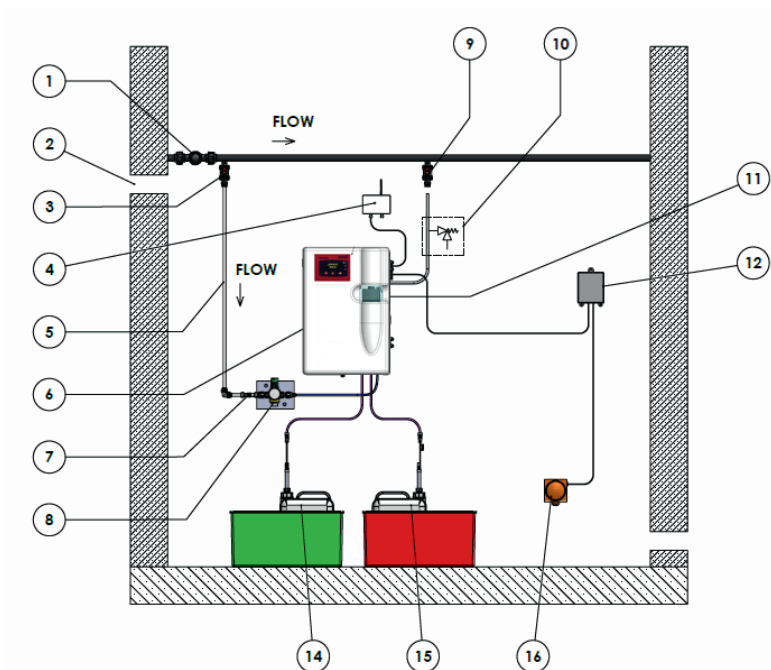
- Models available for 5, 10, 20 and 40 g/h chlorine dioxide generation capacity
- Durable and attractive plastic equipment cover with security lock facility.
- Easy to operate membrane keypad multi-lingual control panel & OLED display with green, amber and red LED operational status indicators.
- Operational parameters displayed with code protected programming.
- Alarm event log with real time clock recording.
- Volumetric measurement and data storage of chemical reagent consumption volumes and site water meter usage.
- Service Due & and Reactor Replacement alert.
- Corrosion resistant PVDF valves and sensors.
- Modbus & Telemetry (optional) to monitor and alert chemical reagent usage, site water/process usage volumes, control status and data trending.
- 2 year product warranty.

## Areas of Application

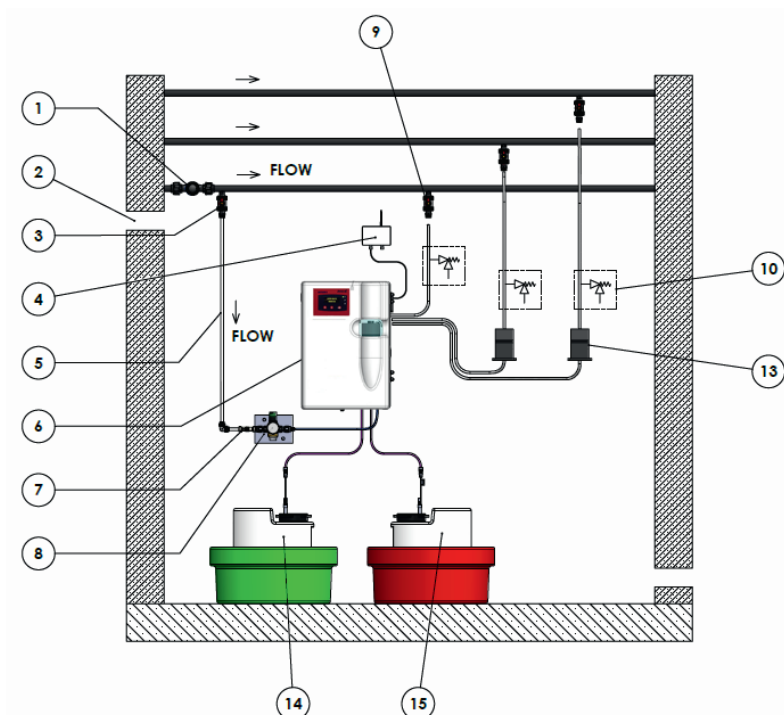
- Combatting legionella in water systems
- Food & beverage CIP disinfection
- Cooling tower biocide treatment
- Food washing / processing treatment
- Municipal potable water disinfection
- Secondary disinfection in public buildings
- Commercial swimming pool filter hygiene
- Odour control in waste processes

## Product Description EASYZON D installation schematics

### Single-point dosing



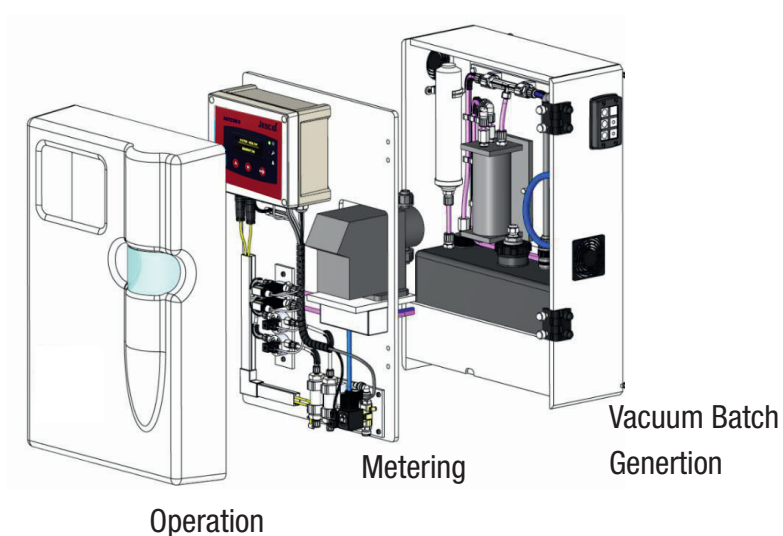
### Multi-point dosing



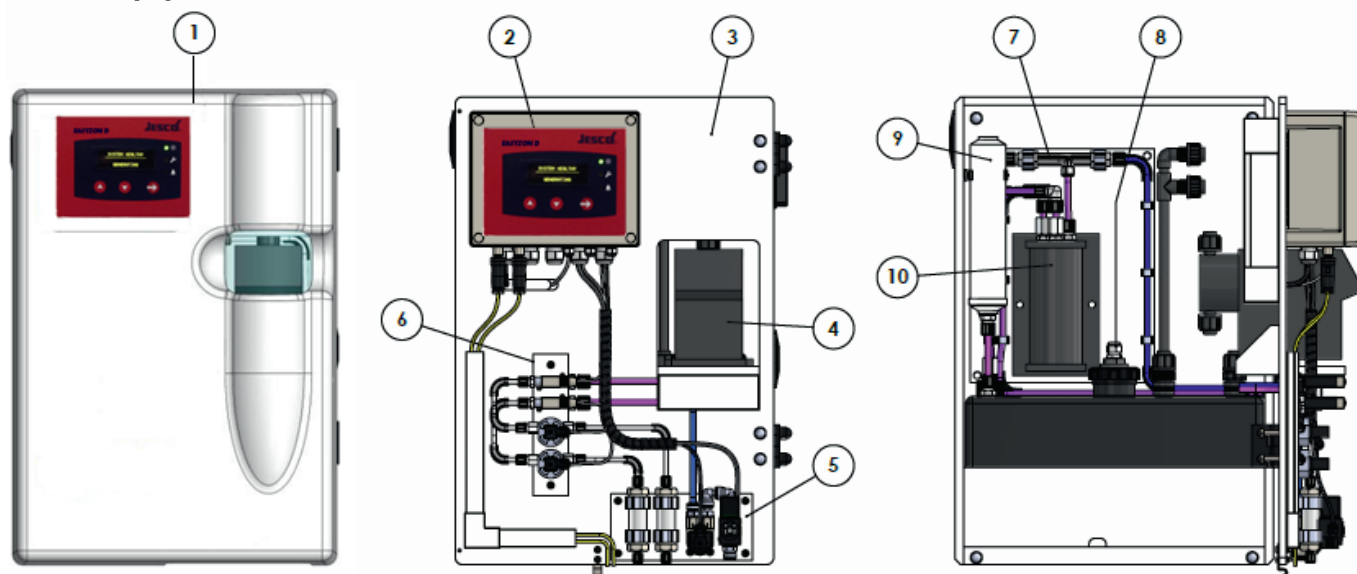
Item	Description
1	Site pulsed water meter (site)
2	Natural room ventilation (site)
3	Cold water feed isolation (site)
4	COMM's/telemetry (optional)
5	Cold feed pipe work (site)
6	EASYZON D chlorine dioxide generator
7	Water supply double check valve (site)
8	Water pressure regulator/filter
9	ClO <sub>2</sub> dosing injection point
10	Dosing retention/relief (optional)
11	Internal ClO <sub>2</sub> dosing pump (optional)
12	Gas detect panel (optional)
13	External ClO <sub>2</sub> dosing pump (optional)
14	Acid reagent drum/tank (optional)
15	Chlorite reagent drum/tank (optional)
16	Gas sensor head (optional)

## Product Description EASYZON D 5,10,20,40 g/h

### EASYZON D Design Concept

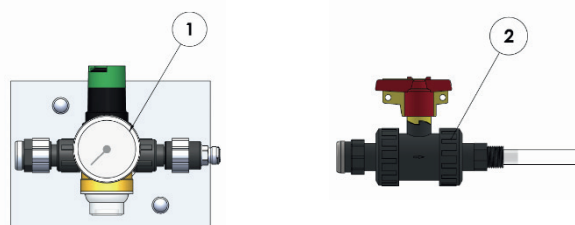


### Feature Equipment



Item	Description
1	EASYZON D plastic cover
2	EASYZON D controller & OLED display
3	Hinged metering & control board assembly
4	Internal ClO <sub>2</sub> dosing pump (optional)
5	Dilution water flow control
6	Chemical reagent flow control
7	Reagent vacuum & dilution device
8	Batch tank level sensor device
9	Batch tank carbon air scrubber
10	ClO <sub>2</sub> reactor assembly
Item	Ancillary Equipment
1	Cold water supply pressure regulator/filter assembly
2	Dosing pump injection/isolation valve assembly

### Ancillary Equipment



## Technical Specification

Description	unit	EASYZON D model capacity			
		5	10	20	40
Chlorine dioxide (ClO <sub>2</sub> ) capacity	g/h	5	10	20	40
ClO <sub>2</sub> generation strength	%	2*			
ClO <sub>2</sub> batch solution strength	mg/l	500	1000	1500	
ClO <sub>2</sub> batch solution production rate	l/h	9.5	10	13.5	26.9
ClO <sub>2</sub> batch tank nominal volume	l	8.5			
Power supply	ø	110 - 240VAC/ø1/ 50-60Hz			
Power rating	VA	20			
Combined peak dosing pump output Dosing pump(s) not included	l/h	15			30
Feed water pressure	bar	2 to 8			
Nominal water consumption	l/h	9.6	9.4	12.4	24.8
Total reagent consumption 1:1 ratio	l/h	0.26	0.52	2.0	4.0
Protection class	IP	54			
Permissible ambient temperature	°C	35			
Permissible feed water temperature	°C	30			

\*precursor concentration (by weight): 9% HCl / 7.5% NaClO<sub>2</sub>

## Part Numbers

Description	Generation capacity	Power supply	Part No.
<b>EASYZON D 5</b>	5g/h	230V	LJED 5/230
	5g/h	110V	LJED 5/110
<b>EASYZON D 10</b>	10g/h	230V	LJED 10/230
	10g/h	110V	LJED 10/110
<b>EASYZON D 20</b>	20g/h	230V	LJED 20/230
	20g/h	110V	LJED 20/110
<b>EASYZON D 40</b>	40g/h	230V	LJED 40/230
	40g/h	110V	LJED 40/110

### Memdos Smart LP

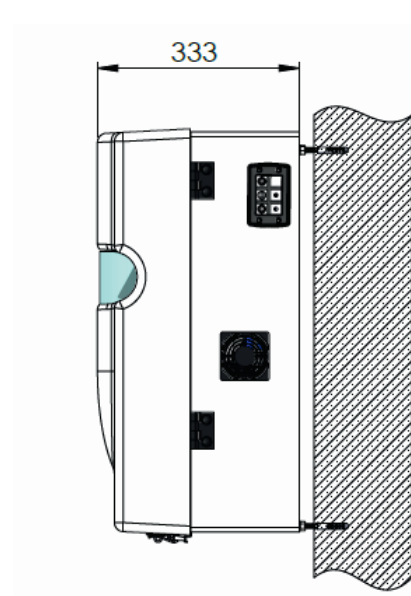
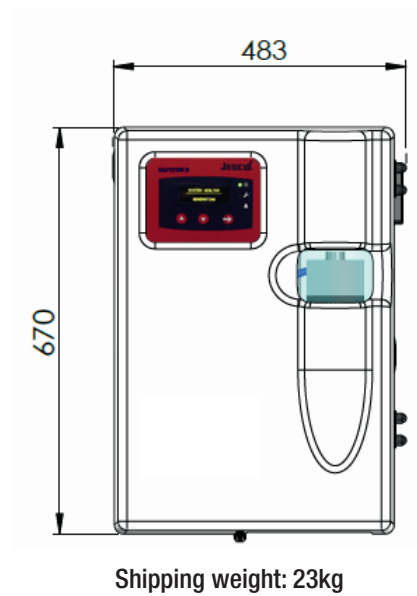
Stepper motor dosing pumps in PVDF are extra.

### Easypro

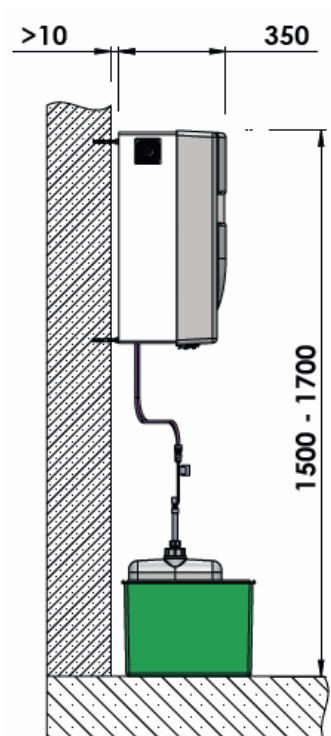
Type CD wall mounted ClO<sub>2</sub> and T monitoring system is extra.  
Available for 40 deg C and for hot water installations up to 65 deg C.

## Dimensions & Weight

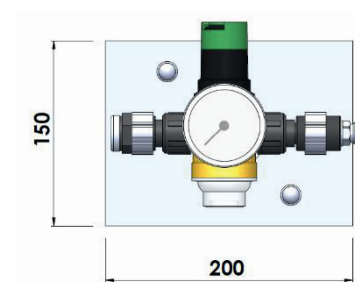
### EASYZON D Overall dimensions (all dimensions in mm)



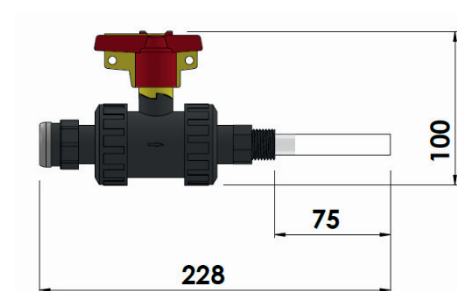
### Recommended installation arrangement dimensions



### Water PRV dimensions



### Injection isolation valve dimensions



## MEMDOS SMART LP

MEMDOS SMART LP dosing pumps are recommended for the reliable metering of chlorine dioxide solutions in combination with EASYZON D. Three specially adapted models are exactly suited to complement the EASYZON D in respect to: capacity, material compatibility and control functionality. Multi-lingual graphic digital display.

A single MEMDOS SMART LP pump is designed to be mounted directly inside the EASYZON D units and/or mounted external to the EASYZON D unit, depending on dosing configuration and the application requirements



MEMDOS SMART LP		Mem Sm LP5	Mem Sm LP10	Mem Sm LP20
Delivery capacity at max. back pressure	l/h	5.1	10.7	20.4
	ml/stroke	0.57	1.19	2.27
Maximum delivery pressure	bar	16	10	5
Delivery capacity at average back pressure	l/h	5.7	11.3	21.2
	ml/stroke	0.63	1.26	2.36
Average delivery pressure	bar	8	5	2.5
Nominal stroke frequency	rpm	150		
Valve size		DN3	DN4	
Tube connection sizes	mm ID/OD	4/6, 6/9, 6/12		
Voltage supply		110 – 240 V, -10 % / +5 %, 50/60 Hz		
Power consumption	W	25		
Protection / insulation class		IP65 (with covering caps on the connections)		
Materials	Head	PVDF (PVDF tube connections)		
	Diaphragm	TFM-PTFE coated EPDM		
	Valves	Double-ball ceramic/ceramic/FPM (ball/seat/gasket)	Double-ball PTFE/PVDF/FPM (ball/seat/gasket)	
Weight	kg	2.2		
Approved ambient temperature	°C	5 – 45		
Approved media temperature	°C	80		

### Dosing control features:

Stroke frequency adjustment, analogue & pulse input, external start-stop, 2 slow-modes, stroke feedback, alarm relay output, batch dosing interval & timer, dosing amount displayed in various units.



## System Accessories

### Chemical dosing accessories



Pressure retention  
valve assembly 6/12



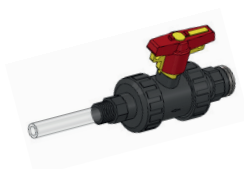
Pressure relief valve  
assembly 6/12



Pressure retention & relief  
valve assembly 6/12



Injection valve  
assembly 6/12



Injection point isolation  
valve assembly 6/12



Rigid drum/tank  
chemical reagent  
switched suctions



einforted PVC chemical  
dosing tube 6/12



Skid system with chemical reagent  
lockable storage security



Chemical day storage tanks (colours optional)



Chemical bund tanks (colours optional)

## System Accessories



### EASYZON D Communications / Telemetry

To take full advantage of functionality: chemical reagent volume usage and minimum level warning alert, site water meter readings, system status and fault diagnosis, the EASYZON D communications unit can provide all this information and more.

Communication is via RS485 Modbus ASCII. Optional telemetry upgrade can provide full Ethernet and 3G/GSM/GPRS communication, ideal for remote service monitoring and data trending. Further signal inputs can be connected to monitor other site conditions such as chlorine dioxide residual levels, temperature and external switch signals.



### EASYPRO

A compact analyser using potentiostatic measurement technology with continuous mechanical self-cleaning of electrodes. Measure, monitor and control chlorine dioxide levels in water tanks and water process streams to help provide reliable indication that disinfection levels are being maintained within the operational guidelines of the water process conditions. The analyser can be used to directly control a MEMDOS SMART dosing pump to maintain minimum chlorine dioxide residual levels and act as a safety cut-out facility in the event of any under/over dosing situations. Includes automatic sample water flow rate stabilisation and sample safety flow switch.



### EASYCON GW Gas Detector

For detection of ClO<sub>2</sub> gas to monitor local air environment at pre-determined safety limits, with integrated visual and audible alarm with mute facility. Alarm and fault relays with fail-safe operation. Supplied with gas sensor 0 to 1 ppm ClO<sub>2</sub> range.



### Photometer

The important task of carrying out chlorine dioxide residual testing and measurement can be easily and accurately performed using photometric test equipment. Portable test kits are ideal for site and service personnel wishing to confirm equipment operation and water conditions are within guideline conditions.