

emec



BLAUTEC[®]

SOLUCIONES
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METERING PUMPS

PRISMA

Stepper motor-driven

- Stepper motor
- Multifunction control
- High strength PTFE membrane -5- year warranty
- Foot mounted
- LCD display



STEPPER MOTOR

- SLOW SUCTION MODE
- TURNDOWN RATIO 1:4800
- EXTERNAL CONSTANT DOSING
- MULTICOLOR DISPLAY
- MULTIFUNCTION

MODE DE FONCTIONNEMENT

- | | | | | |
|----------|-----------------------------|------|----------------------|--------------|
| CONSTANT | CONSTANT à commande externe | | | |
| PPM | % | MA | PAUSE-TRAVAIL | HEBDOMADAIRE |
| MLQ | PULSE | VOLT | BATCH Externe/Manuel | |



PRISMA BLUETOOTH

Configuration available with extra-charge

PUMP HEADS



PVDF PP AISI316L PMMA

SUPPLIED ACCESSORIES



Level Probe with foot filter 1/2" or 3/4" Injection valve

METERING PUMPS



Flow rate up to 80 L/hr, working pressure up to 20 bar

FEATURES

Thanks to the new stepper motor and to the MultiFunction software, PRISMA dosing pumps offer complete control over dosing speeds and working modes as well as great flexibility and repeatability, meeting even particularly complex application needs. PRISMA is also equipped with Level control, Alarms and Stand-by, while available working modes include Constant, Constant with external input, ppm, %, mlq, Pause-work, Weekly, mA, Pulse, Volt, external Batch and manual Batch.

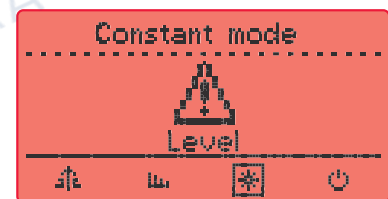
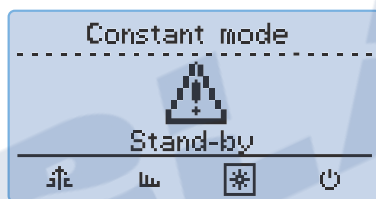
PRISMA dosing pumps feature the Encoder control knob for quickly browsing through the configuration menus and a large display to easily control and regulate the working parameters. By changing background colors PRISMA backlight display is capable of signaling different working status: pump running (green); stand-by (white); warning condition (yellow); alarm condition (red).

TURNDOWN

PRISMA stepper motor-driven pumps give you the most accurate control over the stroke speed, providing an outstanding turndown ratio of up to 4800:1. It means PRISMA, through its digital multifunction control, can split up the dosing process into a maximum of 4800 steps in order to offer the most homogeneous and precise distribution of the product to dose according to the required application.

SLOW MODE

Extreme versatility of PRISMA dosing pumps is also due to Slow Mode function. With Slow Mode enabled you can reduce the suction speed to 75, 50 or 25% of the normal speed, making easier, more reliable and extremely accurate the priming and the dosing even when you have to handle particularly viscous liquids.



CAPACITY RANGE

PRESSURE	CAPACITY	Pump head (PVDF)	Injection hose (PVDF)	Suction hose
20 bar	1 l/h	I	4 x 6	4 x 6
25 bar	2 l/h	L	4 x 6	4 x 6
20 bar	5 l/h	L	4 x 6	4 x 6
16 bar	7,5 l/h	L	4 x 6	4 x 6
10 bar	13 l/h	M	6 x 8	6 x 8
7 bar	20 l/h	N	6 x 8	6 x 8
5 bar	28 l/h	N	8 x 10	8 x 12
4 bar	50 l/h	N	8 x 10	8 x 12
2 bar	80 l/h	N	8 x 10	8 x 12

METERING PUMPS

AMS Series

Flow rate up to 60 L/hr, working pressure up to 25 bar

- Manual stroke length adjustment
- Manual or self venting
- High strength membrane -5- year warranty
- Horizontal mounting
- PVDF pump head



- AMS MF digital multi-function
- AMS PH built-in pH reading and adjustment
- AMS RH built-in ORP reading and adjustment

- AMS PLUS constant / constant 1-10 multiplier 1-10 divider 1-10 / 1-100 / 1-1000 mA current signal
- AMS CO PLUS constant with divider 1/10
- AMS CL PLUS constant with level control and divider 1/10

PUMP HEADS



PVDF

PP

AISI316

PMMA

LPV

P

SUPPLIED ACCESSORIES



Level Probe with foot filter



1/2" or 3/4" Injection valve

METERING PUMPS



K Series

Flow rate up to 18 L/hr, working pressure up to 20 bar

- Manual stroke length adjustment
- Manual or self venting
- High strength membrane -5- year warranty
- Horizontal mounting
- PVDF pump head



- KMS DC** digital constant
- KMS MF** digital multi-function
- KMS PH** built-in pH reading and adjustment
- KMS RH** built-in ORP reading and adjustment
- KMS EN** weekly timer and solenoid valve control
- KMS CL** built-in chlorine reading and control

- K PLUS** constant / constant 1-10 multiplier 1-10 divider 1-10 / 1-100 / 1-1000 mA current signal
- K CO PLUS** constant with divider 1/10
- K CL PLUS** constant with level control and divider 1/10

PUMP HEADS

SUPPLIED ACCESSORIES



PVDF



PP



AISI316



PMMA



LPV



P



Level Probe with foot filter



1/2" Injection valve

METERING PUMPS

T Series

Flow rate up to 100 L/hr, working pressure up to 20 bar

- Electronic flow adjustment
- Manual or self venting
- High strength membrane - 5 - year warranty
- Wall mounting
- PVDF pump head



- TMS DC digital constant
- TMS MF digital multi-function
- TMS PH built-in pH reading and adjustment
- TMS RH built-in ORP reading and adjustment

- TCO constant
- TCL constant with level control

PUMP HEADS



PVDF

PP

LPV

P

SUPPLIED ACCESSORIES



Level Probe with foot filter



1/2" or 3/4" Injection valve

METERING PUMPS



V Series

Flow rate up to 16 L/hr, working pressure up to 20 bar

- Réglage électronique du débit
- Purge manuelle ou automatique
- Membrane haute résistance - garantie 5 ans
- Montage mural
- Tête de pompe en PVDF
- Modèles silencieux et ultra-silencieux également disponibles



- VMS MF digital multi-function
- VMS PO built-in pH or ORP reading and control (set by menu)
- VMS EN weekly timer and solenoid valve control

- VCO constant
- VCL constant with level control

PUMP HEADS



PVDF
Manual venting



PP
Manual venting



PVDF
Self venting



PP
Self venting

SUPPLIED ACCESSORIES



Level Probe
with foot filter



1/2" Injection
valve

METERING PUMPS

WDPHXX Series

Flow rate up to 10 L/hr, working pressure up to 7 bar

- Digital programmable controller with double metering pumps
- Wall mounting
- Easy control by ENCODER wheel with EASY-NAV rotation
- Double PVDF pump head
- RS485 output for remote control



- WDPHRH acid (pH) and disinfectant (ORP)
- WDPHCL acid (pH) and chlorine
- WDPHCF acid, flocculant (gr/h) and 230 VAC output for chlorine

- WDPHCA acid, anti-algae and 230 VAC output for chlorine
- WDPHOS acid (pH) and active oxygen

PUMP HEADS



PVDF Manual venting PP Manual venting PVDF Self venting PP Self venting

SUPPLIED ACCESSORIES



Level Probe with foot filter Clapet d'injection 1/2"

METERING PUMPS



RAC Series

Car Wash

- Compressed Air driven pumps
- 3 installing modes: horizontal, wall and DIN rail mounting
- Multiple pumps installation (side by side)
- Single injection control knob



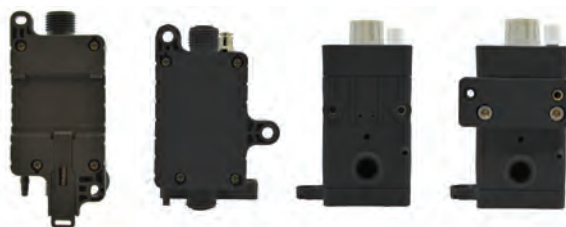
- RAC Pneumatic
- RACV Pneumatic with electrovalve
- RACP Pneumatic with priming button

PUMP HEADS



Pump Head Diaphragm

INSTALLING OPTIONS



DIN rail Wall Horizontal

SUPPLIED ACCESSORIES



Foot filter 1/2" Injection valve

METERING PUMPS

PRIUS

Flow rate up to 1000 l/h, working pressure up to 10 bar



PRIUS D MF

Multifunction motor driven diaphragm dosing pumps

- PTFE diaphragm
- 230 VAC single phase power supply
- Wide display with clear information and easy navigation system with the click and turn wheel.
- Gear box can be rotated on the field 90 degrees for optimal installation
- Operating modes: Constant - ppm - % - mlq - pause-work - pulse - weekly - mA - Volt and Batch
- Level input
- Stand-by
- MODBUS (optional)
- IP65 Motor (optional)

PUMP HEADS



PVDF

PP

AISI316

PVC

METERING PUMPS



PRIUS

Flow rate up to 320 l/h, working pressure up to 10 bar



PRIUS P MF

Multifunction motor driven plunger dosing pumps

- Ceramic or SS plunger
- 230 VAC single phase power supply
- Wide display with clear information and easy navigation system with the click and turn wheel.
- Gear box can be rotated on the field 90 degrees for optimal installation
- Operating modes: Constant - ppm - % - mlq - pause-work - pulse - weekly - mA - Volt and Batch
- Level input
- Stand-by
- MODBUS (optional)
- IP65 Motor (optional)

PUMP HEADS



PP

AISI316L

PLUNGERS



CERAMIC (SIALOX96)

AISI420

METERING PUMPS

PRIUS

Flow rate up to 1000 l/h, working pressure up to 10 bar



PRIUS D

Motor driven diaphragm metering pump

- Solid Teflon diaphragm pump heads with built in priming valve
- Stroke length adjustment
- Single and three phase motors.
- 0.18, 0.37 and 0.55 kW motors sizes
- 50 and 60 Hz motors
- Foot valve with filter, injection valve and tubing included in the pumps with capacities up to 240 l/h

PUMP HEADS



PVDF

PP

AISI316L

PVC

METERING PUMPS



PRIUS

Flow rate up to 508 l/h, working pressure up to 10 bar



PRIUS P

Motor driven plunger metering pump

- Ceramic and SS plungers
- SS and PP pump heads
- Stroke length adjustment
- Single and three phase motors
- 0.18, 0.37 and 0.55 kW motors sizes
- 50 and 60 Hz motors

PUMP HEADS



PP

AISI316L

PLUNGERS



CERAMIC (SIALOX96)

AISI420

METERING PUMPS

PRIUS

Flow rate up to 170 l/h, working pressure up to 100 bar



PRIUS D HIGH PRESSURE & PRIUS D HIGH PRESSURE ATEX 2D/2G
Motor driven diaphragm metering pump

- SS pump head
- Solid Teflon diaphragm
- Stroke length adjustment
- Single and three phase motors



PUMP HEADS



AISI316L

METERING PUMPS



PRIUS

Flow rate up to 240 l/h, working pressure up to 10 bar



PRIUS D ATEX & PRIUS P ATEX 2D/2G-3D/3G

Motor driven diaphragm/plunger metering pump

- PTFE diaphragm / Ceramic or SS plunger
- Stroke length adjustment
- Three phase motors
- Aluminium enclosure
- Stainless steel liquid ends (AISI 316)



PUMP HEADS (PRIUS D ATEX)

PUMP HEADS & PLUNGERS (PRIUS P ATEX)



METERING PUMPS

Pumps Accessories

Reliable products

CHEMICAL TANKS & SAFETY BUNDS



Chemical tanks made of polyethylene, UV resistant with safety bunds. For dosing pumps and mixers.



Our chemical tanks can be assembled with:

- 1 Dosing pump (or 2 without mixer)
- 1 mixer
- 1 water loading faucet
- 1 outgassing valve
- 1 or 2 suction lances
- 1 water purging faucet
- 2 level probes with filter (without mixer)

Assembling made with two dosing pumps must use a double-suction lance and KDPV kit for connecting both the pumps.

MIXVN/8



High speed mixer 1400 RPM. AISI shaft-PVC coated, different lengths available (630-730). Marine impeller, diameter 70mm.

MIXN/8



Slow speed mixer 65/200 RPM. AISI shaft-PVC coated, different lengths available (630-730mm). 3-blade impeller, diameter 150mm.

MIXN/MAN



Manual mixer. PVC shaft, different lengths available (450-650 and 770-1100 mm). Impeller diameter 130 mm.

MIX « PISTON »



Manual mixer. PVC shaft, different lengths available (450 mm).

METERING PUMPS



Pumps Accessories

Reliable products

LASP



Suction lances with level control, for tanks up to 1000 liters.

LINI R



1/2" injection lance for dosing sodium hypochlorite in hard water. Self cleaning. FKM B o-ring. PVDF or Stainless Steel body.

MF MULTIFUNCTION VALVE



Multifunction valve (pressure, safety, antisiphon and bleed) 1/2" connections for different hoses diameters. FKM B or EPDM o-ring. PVDF body.

SEFL



Flow sensor with PVDF body, N.C. contact and adjustable sensitivity.

Max 45°C - 25 bar

CWFA



Woltmann water pulse sender water meter, dry dial.

Max 60°C - 16 bar

CTFI



Cold water pulse sender water meter.

Max 30°C - 16 bar

CATFI - dry dial

CWFAT



Woltmann water pulse sender water meter, dry dial and PTFE internal/external coating.

Max 60°C - 16 bar

CTFIT



Cold water pulse sender water meter and PTFE internal/external coating.

Max 30°C - 16 bar

CHLORINE DIOXIDE GENERATOR



ADVANTAGES

Reaction at controlled pressure

Max capacity: from 8 to 20 g/h

- › High degree of stability of the chlorine dioxide solution
- › No ClO_2 loss due to closed reaction chamber
- › Diluted chemicals

Also available equipped with a ClO_2 probe (SCL2 or SCL17) or a Redox probe (ERH), a probe holder and a filter.

GAS SENSOR OPTION

LOTUS MINI with gas sensor detection.

LOTUS MINI is an all-round solution for all your need for water disinfection. It is safe and solid and can also be controlled remotely via the web application ERMES through a 2G/3G modem or a lan adapter, while Modbus is available as option.

Its elegant cover preserves the cleanliness of the inner components and their integrity. Chlorine dioxide produced by LOTUS MINI can be proportional to the circulating water flow or based on a measured setpoint. There is no storage of chlorine dioxide therefore there is no chlorine dioxide gas or concentrated solutions outside of the process application.

Max capacity: from 8 to 20 g/h

FEATURES

- › Instantaneous ClO_2 production
- › ClO_2 dosing in proportional mode
- › Flow control input (flow alarm)
- › Tank level controls (level alarms)
- › Water meter input
- › Stand-by input
- › Real time production data
- › Pumps and SEFL flow sensors monitoring
- › Permanent data storage with system data log (on Logbook menu)
- › ERMES communication
- › USB data log (option)
- › Ethernet module (option)
- › GSM internal modem (option)
- › MODBUS module (option)
- › WIFI module (option)
- › Service due date
- › mA output
- › ClO_2 concentration: 2 g/l
- › Flow control input (flow alarms)
- › Tank level control (level alarms)
- › HCl (red), NaClO_2 (blue) and dilution water (grey) metering pumps
- › 3 SEFL pump dosing check
- › MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed valve
- › PVC reaction chamber
- › ASA (Acrylonitrile Styrene Acrylate) or fiber glass enclosure
- › IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- › Wheel control for easy programming
- › Working temperature: 0-45°C (32-110°F)

CHLORINE DIOXIDE GENERATOR



ADVANTAGES

Reaction at ambient pressure

Max capacity: 10 g/h - 30 g/h - 60 g/h

- › Multi-point injection
- › No emission
- › Diluted chemicals

Also available equipped with a ClO_2 probe (SCL2 or SCL17) or a Redox probe (ERH), a probe holder and a filter.

GAS SENSOR OPTION

LOTUS AIR with gas sensor detection.

LOTUS AIR is a pressure-less chlorine dioxide generator useful for those applications in which several injection points are required. Chlorine Dioxide is produced from diluted base chemicals: acid-chlorite process by Hydrochloric Acid (HCl 9%) and Sodium Chlorite (NaClO_2 7,5%).

Chlorine dioxide produced by LOTUS AIR is stocked into a tank and then dosed proportionally to the request. It can also be controlled remotely via the web application ERMES through a 2G/3G modem or a lan adapter, while Modbus is available as option. Its elegant cover preserves the cleanliness of the inner components and their integrity.

Max capacity: from 10 to 60 g/h

FUNCTIONS

- › BATCH chlorine dioxide production
- › ClO_2 dosing in proportional mode
- › 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
- › USB data log (option)
- › Ethernet module (option)
- › GSM internal modem (option)
- › MODBUS module (option)
- › WIFI module (option)
- › ClO_2 concentration in water measurement and control
- › mA output
- › ClO_2 concentration: 2 g/l
- › HCl (red), NaClO_2 (blue) and ClO_2 (grey) metering pumps
- › MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- › Double chamber: reaction and storage
- › ASA (Acrylonitrile Styrene Acrylate) or fiber glass enclosure
- › IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- › Wheel control for easy programming
- › Working temperature: 0-45°C (32-110°F)

CHLORINE DIOXIDE GENERATOR



LOTUS MAXI is one of the largest product among EMEC Chlorine Dioxide generators and is used in all those cases in which there is need of a big production, such as large water treatment plants.

Chlorine dioxide produced by LOTUS MAXI is set to be proportional to the circulating water flow or based on a setpoint, it is then dosed into the water flow.

It can also be controlled remotely via the web application ERMES through a 2G/3G modem or a lan adapter, while Modbus is available as option.

Max capacity: from 80 to 1000 g/h

FEATURES

- > Instantaneous ClO₂ production
- > ClO₂ dosing in proportional mode
- > Flow control input (flow alarm)
- > Tank level controls (level alarms)
- > Water meter input
- > Stand-by input
- > Real time production data
- > Pumps and SEFL flow sensors monitoring
- > Permanent data storage with system data log (on Logbook menu)
- > ERMES communication
- > USB data log (option)
- > Ethernet module (option)
- > GSM internal modem (option)
- > MODBUS module (option)
- > WIFI module (option)
- > Service due date
- > mA output
- > ClO₂ concentration: 2 g/l
- > Flow control input (flow alarms)
- > Tank level control (level alarms)
- > HCl (red) and NaClO₂ (blue) metering pumps
- > 3 SEFL flow sensors as security
- > MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- > PVC reaction chamber
- > ASA (Acrylonitrile Styrene Acrylate) enclosure
- > IP65 protection (NEMA4x) of LOTUS control instrument and pumps
- > Wheel control for easy programming
- > Working temperature: 0-45°C (32-113°F)

ADVANTAGES

Reaction at controlled pressure

Max capacity: from 80 to 1000 g/h

- > Large-scale applications
- > High degree of stability of the chlorine dioxide solution
- > No ClO₂ loss due to closed reaction chamber
- > Diluted chemicals

GAS SENSOR OPTION

LOTUS MAXI with gas sensor detection.

CHLORINE DIOXIDE GENERATOR



 **LOTUS** EASY



LOTUS EASY is the best solution if you want a simple but professional way to produce chlorine dioxide, thanks to an integrated All-in-One Controller equipped with two metering pumps.

Chlorine dioxide produced by LOTUS EASY can be proportional to the circulating water flow or based on a measured setpoint, it is then dosed into the water flow.

There is no storage of chlorine dioxide therefore there is no chlorine dioxide gas or concentrated solutions outside of the process application.

LOTUS EASY is designed so that the reaction to produce chlorine dioxide takes place in a reaction chamber. Multi function valves on injection points ensure security of the reaction chamber.

Max capacity: from 8 to 80 g/h

FEATURES

- > Instantaneous ClO₂ production
- > ClO₂ dosing in proportional mode
- > Level alarms
- > Water meter input
- > Stand-by input
- > Real time production data
- > Pumps and SEFL flow sensors monitoring
- > Service due date
- > By-pass flow detection
- > mA (0-20mA) input
- > ClO₂ concentration: 2 g/l
- > Level alarms
- > 2 flow sensors
- > MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed
- > Static mixer
- > PVC reaction chamber
- > Working temperature: 0-45°C (32-113°F)
- > 600 x 800 mm panel mounting
- > By-pass diameter: DN 40

ADVANTAGES

Reaction at ambient pressure

Max capacity: from 8 to 80 g/h

- > High degree of stability of the chlorine dioxide solution
- > No ClO₂ loss due to closed reaction chamber
- > Diluted chemicals

CHLORINE DIOXIDE GENERATOR



LOTUS ULTRA is the largest product among EMEC Chlorine Dioxide generators and is used in all those cases in which there is need of a big production, such as large water treatment plants.

Chlorine Dioxide is produced from concentrated base chemicals: acidchlorite process by Hydrochloric Acid (HCl 33%) and Sodium Chlorite (NaClO₂ 27%).

Chlorine dioxide produced by LOTUS ULTRA is set to be proportional to the circulating water flow or based on a setpoint, it is then dosed into the water flow.

Max capacity: 2000 g/h

FEATURES

- > Instantaneous ClO₂ production
- > ClO₂ dosing in proportional mode
- > Flow control input (flow alarm)
- > Tank level controls (level alarms)
- > Water meter input
- > Stand-by input
- > Real time production data
- > Pumps and SEFL flow sensors monitoring
- > Permanent data storage with system data log (on Logbook menu)
- > Service due date
- > LOTUS control instrument
- > HCl (red) and NaClO₂ (blue) metering pumps
- > 2 pumps for dilution water (grey)
- > 4 SEFL flow sensors as security
- > MFKT/V multifunction valve as pressure, safety, anti-syphon and bleed valve
- > PVDF reaction chamber
- > IP65 protection (NEMA4x) of LOTUS control instrument
- > ENCODER wheel control
- > Working temperature: 0-45°C (32-110°F)
- > mA output
- > ClO₂ probe reading
- > Temperature probe reading (probe and accessories not included)

ADVANTAGES

Reaction at controlled pressure

Max capacity:: 2000 g/h

- > Large-scale applications
- > High degree of stability of the chlorine dioxide solution
- > No ClO₂ loss due to closed reaction chamber
- > Diluted chemicals

Also available equipped with a ClO₂ probe (SCL2 or SCL17) or a Redox probe (ERH), a probe holder and a filter.

GAS SENSOR OPTION

LOTUS ULTRA with gas sensor detection.



CENTURIO PRO / TOWER / POOL

10 channels

Water treatment



UP TO 10 CHANNELS (6 ANALOG)

CONDUCTIVITY - CONTACT OR INDUCTIVE

pH

ORP

CHLORINE

TRACERS

mA INPUT

TURBIDITY

POTENTIOSTATIC

DISSOLVED OXYGEN

LEVEL LASER SENSOR

CORROSION

ONLINE REMOTE CONTROL

REALTIME PARAMETERS READING AND REGULATION

SETTINGS EXPORT / IMPORT

REMOTE SOFTWARE UPDATE

CENTURIO TOWER is the control instrument in cooling tower water treatment, with the ease and safety you need and with the stylish box designed by Giugiaro Design. CENTURIO is equipped with a Linux operating system, a high-performance ARM A5 microprocessor, a large, touchscreen, color display, in order to give you total and simultaneous control, also with real-time graphs, over 5 channels and the most important parameters for cooling tower water treatment, such as conductivity, chlorine, pH or ORP.

CENTURIO TOWER can connect to the internet and then be safely configured and managed with ERMES wherever you are by using any device and any browser. It is also equipped with MODBUS serial communication to be connected to other devices on RS485 networks and TCP/IP MODBUS.

HARDWARE

- Large 4.3" LCD Full Color
- Touchscreen Display
- High-performance ARM A5 microprocessor
- Large capacity storage for logging

SOFTWARE

- ERMES Remote Control
- Multi-language
- Cross platform software
- Communication WIFI - 3G - ETHERNET - MODBUS
- High performance with LINUX operating system

PARAMETERS

- CENTURIO TOWER with conductivity measurement
- 5 Modular channels to combine
- MODBUS TCP/IP and RTU module included
- ETHERNET module included
- USB module included
- WIFI or 3G module as option
- 0-20 mA input module as option to control different parameters remotely

DESIGN

- Box design by GIUGIARO DESIGN
- New "EASY-MOUNT" system
- Designed for mounting on pipes
- Opening with side zipper and captive screws

INSTRUMENTS

MAX5 Series

5 channels plus 1 for temperature

- Water treatment
- Cooling towers
- Industrial chemical dosing
- Depuration
- Swimming pools disinfection



Factory parameter configuration.

- pH
- ORP (ORP)
- Chlorine (total, free and combined)
- Chlorine dioxide
- Hydrogen Peroxide
- Ozone
- Peroxyacetic acid
- Turbidity
- Conductivity (contact or inductive)
- Dissolved oxygen
- Temperature
- Bromine

Its versatility allows different programming solutions: each channel can be programmed on user needs. All information is provided through a widescreen LCD display (240x64).

Instrument has:

- 6 setpoints output (on/off, PID or PWM) and 6 proportional output
- 1 Temperature setpoint
- 1 probe cleaning output
- 5 level tank input
- 5 daily/weekly timer for multiple options like flocculant, algicide, lights...
- Water meter input for water restore
- Temperature probe input
- Alarm output
- Wheel with "EASY-NAV" control
- ERMES web communication
- Local & Remote Controlled
- Multiple probe readings can be viewed
- Probe readout menu
- Probes check up
- Permanent data storage with system log
- Stand-by input
- Alarms: damaged probes - max dosage - 2 overflow alarms per channel - 5 product level alarms - flow alarm
- Totalizer for instant flow rate

OPTIONS

- MODBUS protocol



LD Multichannel / PLUS Series

2 channels plus 1 for temperature

- Water treatment
- Cooling towers
- Industrial-level chemical dosing
- Depuration
- Agriculture
- Swimming pools disinfection



Factory parameter configuration.

- pH
- ORP
- Chlorine/Bromine
- Conductivity
- Inductive Conductivity
- Chlorine Dioxide
- Hydrogen peroxyde
- Ozone
- Peracetic acid
- Turbidity

Controller for acid (pH) and a second parameter. Wheel with "EASY-NAV" control, Flow control, Local & Remote Controlled, ERMES web communication, Permanent data storage with system log, PT100 temperature probe, Stand-by input. Alarms: damaged probes - max dosage - threshold - levels - flow - reading. Programmable delay at dosing start-up (up to 60 minutes), Priority dosage, Probe readout menu, Probes check up, Multiple probe readings can be viewed. Working modes: on/off, impulsive proportional, proportional PWM and fixed PWM. Automatic or manual dosing activity, Chlorine/Bromine selection with SBR (LDPHCL), Flocculant pump control, mA output (option).

Options:

- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- 2G/3G modem
- MODBUS protocol
- WIFI module

PLUS Features:

- 5 relais (2 setpoint; alarm; probe cleaning; circulation)
- Probe cleaning
- PID
- Feed forward

- LDPHRH - LDPHRH PLUS pH (0-14) - ORP (0-1000mV) - °C (0-200)
- LDPHCL* - LDPHCL PLUS* pH (0-14) - Chlorine (0-10 mg/l Cl2) - °C (0-200)
- LDPHBR - LDPHBR PLUS pH (0-14) - Bromine (0-10 mg/l Br) - °C (0-200)
- LDPHO2 - LDPHO2 PLUS pH (0-14) - O2 (0-200 mg/l H2O2) - °C (0-200)
- LDPHCD - LDPHCD PLUS pH (0-14) - Conductivity (depending on the probe) - °C (0-200)
- LDPHCDIND - LDPHCDIND PLUS pH (0-14) - Inductive conductivity (0-3 mS|0-30mS|0-300mS) - °C (0-99,9)
- LDPHTORBH - LDPHTORBH PLUS pH (0-14) - Turbidity (0-9999 NTU) - °C (0-99,9)

LD - Custom configurations on client request.

* When ordering, please specify the parameters and the chlorine probe model.

INSTRUMENTS

LDS / LDS PLUS Series

1 channel plus 1 for temperature

- Water treatment
- Cooling towers
- Industrial-level chemical dosing
- Depuration
- Agriculture
- Swimming pools disinfection



Factory parameter configuration.

- pH
- ORP
- Chlorine/Bromine
- Conductivity
- Inductive Conductivity
- Chlorine Dioxide
- Hydrogen peroxyde
- Ozone
- Peracetic acid
- Turbidity
- Dissolved Oxygen

Wheel with "EASY-NAV" control, flow control, local & Remote Control, ERMES web communication, permanent data storage with system log, PT100 temperature probe, Stand-by input, Alarms: damaged probes - max dosage - threshold - levels - flow, Programmable delay at dosing start-up (up to 60 minutes), Priority dosage, Automatic temperature compensation, Probe readout menu (LDSCDIND), Working modes: on/off, impulsive proportional, proportional PWM and fixed PWM, Automatic or manual dosing activity, mA output (option).

Options for LDS and LDS PLUS:

- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- 2G/3G modem
- MODBUS protocol
- WIFI module

PLUS Features:

- 5 relais (2 setpoint; alarm; probe cleaning; circulation)
- Probe cleaning
- PID
- Feed forward

- LDSPH - LDSPH PLUS** pH (0-14) - °C (0-200)
- LDSRH - LDSRH PLUS** ORP (0-1000mV) - °C (0-200)
- LDSCl - LDSCl PLUS** Chlorine (0-10 mg/l Cl₂) - °C (0-200)
- LDSCD - LDSCD PLUS** Conductivity (depending on the probe) - °C (0-200)
- LDSCDIND - LDSCDIND PLUS** Inductive conductivity (0-3 mS|0-30mS|0-300mS) - °C (0-99,9)
- LDSETORB2 - LDSETORB2 PLUS** Turbidity (0-4000 NTU) - °C (0-40)
- LDSTRC - LDSTRC PLUS** Markers (0-9999 PPM) - °C (0-200)
- LDSFR - LDSFR PLUS** Fluorine (1E-5-1M) - Concentration (0-300 ppm) - °C (0-60)



MTOWER Series

Up to 3 channels

Cooling towers



Features

- Conductivity for blowdown
- 2 Timers for biocides
- Pre-bleed
- Lockout

Factory parameter configuration.

- pH
- ORP
- Chlorine
- Conductivity or Inductive conductivity
- Temperature

Easy control by ENCODER wheel with "EASY-NAV" rotation, Current Feed&Bleed display, Local & Remote Controlled, ERMES web communication, Simultaneous multiple view for probes reading, Permanent data storage with system log, Stand-by input, mA output (option). Working modes: on/off, impulsive proportional, proportional PWM and fixed PWM. Pre-bleed: Reduced water system conductivity before biocide dosing. Blow down: Discharge control on conductivity values, Lockout: Discharge valve locked for a settable time (after biocide dosage). Timeout: Maximum discharge valve opening time, Programmable delay at dosing start-up (up to 99 minutes), PT100 temperature compensation. Alarms: conductivity (high/low), Bleed timeout (conductivity not reached after set time), product level, flow, meter activity, not restored water.

Options:

- Conductivity inductive probe.
- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- 2G/3G modem
- WIFI module
- MODBUS protocol

3 CHANNELS MODELS

MTOWER PLUS CD/PH/CL : controller for conductivity, pH and chlorine

MTOWER PLUS CD/PH/RH : controller for conductivity, pH, ORP

2 CHANNELS MODELS

MTOWER CD/PH : controller for conductivity and pH

MTOWER CD/RH : controller for conductivity and ORP

MTOWER CD/CL : controller for conductivity and chlorine

1 CHANNEL MODEL

MTOWER CD : controller for conductivity

CONTROLLERS

Panel instruments

1 channel with temperature

- Water treatment
- Cooling towers
- Industrial-level chemical dosing
- Depuration
- Agriculture
- Swimming pools disinfection

JA PRO

96x96 RACK-MOUNT SINGLE READING



- JA PRO PH pH
- JA PRO RH ORP
- JA PRO CL Chlorine (Total - Free) - Chlorine Dioxide - Hydrogen - Peroxyde - Ozone - Bromine - Peracetic Acid
- JA PRO CD Conductivity
- JA PRO CD IND Inductive conductivity

JA PRO control instruments are a series of rack-mount (96x96) single reading systems with temperature reading, mA module and native modbus. On/Off, impulsive proportional and PID are main working modes.

It can set and monitor: pH, ORP, chlorine (depending on the probe: total chlorine, free chlorine, chlorine dioxide, hydrogen peroxide, ozone, bromine or paracetic acid) and conductivity (uS/S - Ohm - TDS / PPM) with automatic range and probe / product selection (H3PO4 - H2SO4 - HNO3 - HCl - NaOH - NaCl).

Features

- 2 setpoints (on/off, proportional)
- flow alarm,
- flow sensor
- stand-by input
- 0-20 mA or 4-20 mA output
- proportional to read value and programmable in the reading range
- alarm output
- mA module
- MODBUS serial communication

Options

- Available low voltage 9-18VDC or 18-36VDC power supply.
- Available IP54 protection cover.



Panel instruments

1 channel with temperature

- Water treatment
- Cooling towers
- Industrial-level chemical dosing
- Depuration
- Agriculture
- Swimming pools disinfection

J DIGITAL

96x48 RACK-MOUNT SINGLE READING



- J DIGITAL PH pH
- J DIGITAL RH ORP
- J DIGITAL CL Chlorine (Total - Free) - Chlorine Dioxide - Hydrogen Peroxyde - Ozone - Bromine - Peracetic Acid
- J DIGITAL CD Conductivity
- J DIGITAL O3 Ozone
- J DIGITAL CLO2 Chlorine dioxide
- J DIGITAL TEMP Temperature

J DIGITAL control instruments are a series of rack mounting (96x48) single reading systems that meets many applications.

It can set and monitor: pH, ORP, chlorine (depending on the probe: total chlorine, free chlorine, chlorine dioxide, hydrogen peroxide, ozone, bromine or paracetic acid), conductivity, ozone, chlorine dioxide and temperature. Probes are not included.

J DIGITAL models have: 2 setpoints (on/off, proportional), flow alarm, flow sensor stand-by input, 0-20 mA or 4-20 mA output proportional to read value and programmable in the reading range.

Available IP54 protection cover.

DIN DIGITAL

RAIL-MOUNT (6 modules) SINGLE READING



- DIN DIGITAL PH pH
- DIN DIGITAL RH ORP
- DIN DIGITAL CL Chlorine (Total - Free) - Chlorine Dioxide - Hydrogen Peroxyde - Ozone - Bromine - Peracetic Acid
- DIN DIGITAL CD Conductivity
- DIN DIGITAL O3 Ozone
- DIN DIGITAL CLO2 Chlorine dioxide
- DIN DIGITAL TEMP Temperature

DIN DIGITAL control instruments are a series of rail mounting (6 modules) single reading systems that meets many applications.

It can set and monitor: pH, ORP, chlorine (depending on the probe: total chlorine, free chlorine, chlorine dioxide, hydrogen peroxide, ozone, bromine or paracetic acid), conductivity, ozone, chlorine dioxide and temperature. Probes are not included.

DIN DIGITAL models have: 2 setpoints (on/off, proportional), flow alarm, flow sensor stand-by input, 0-20 mA or 4-20 mA output proportional to read value and programmable in the reading range.

INSTRUMENTS

ERMES

Software for complete remote configuration and control of instruments

ADVANTAGES

- reduces plant intervention and inspections.
- reports on the current status of the network's devices and connections (probes, outputs, alarms, setpoints)
- instantly gives notification of alarms by sms or email
- generates an up to date report of all plant instruments
- can display the instruments activity log as line graphs and charts and it can download it to your pc in excel or pdf format



HOW DOES ERMES WORK?

Enter the website www.ermes-server.com and, after registration, set your plants.

EMEC instruments with ETHERNET, 3G or WIFI Configuration will be immediatly connected and available for remote control.

Furthermore, with ERMES you can receive alarm messages via email, with different report option on instrument status. If your instrument has a 3G Configuration you can receive SMS report on your mobile. All EMEC latest controllers are ERMES ready:

- CENTURIO TOWER
- MAX5
- LD MULTICHANNEL
- LD WITH ENCODER (wheel)
- MTOWER
- WD
- JA



AVAILABLE CONFIGURATIONS FOR CONTROL INSTRUMENTS



BASIC

- › RS485 output to link other EMEC instruments



ETHERNET

- › RS485 output to link other EMEC instruments
- › LAN connection to web app ERMES
- › Alarm messages via email



3G

- › RS485 output to link other EMEC instruments
- › 3G connection to web app ERMES
- › Alarm messages via email
- › Alarm messages via SMS



WIFI

- › RS485 output to link other EMEC instruments
- › WIFI connection to web app ERMES
- › Alarm messages via email



USB

- › RS485 output to link other EMEC instruments
- › USB connection for downloading of log files to be viewed on web app ERMES



MODBUS

- › Connection to other PLC instruments via RS485 or TCP/IP for reading and modifying parameters

CONFIGURATION	FEATURES	CONNECTION TYPE	REQUIREMENTS	FUNCTIONS
BASIC	/	Local control	/	- RS485 link to EMEC instruments
ETHERNET	LAN	Remote control via ERMES web app (www.ermes-server.com)	LAN (RJ-45)	- RS485 link to EMEC instruments - ERMES Web App (PC, smartphone, tablet) - Email Alarm messages
3G	MOBILE	Remote control via ERMES web app (www.ermes-server.com)	Network Coverage	- RS485 link to EMEC instruments - ERMES Web App (PC, smartphone, tablet) - Email / SMS Alarm messages
WIFI	WIFI	Remote control via ERMES web app (www.ermes-server.com)	Network Coverage	- RS485 link to EMEC instruments - ERMES Web App (PC, smartphone, tablet) - Email Alarm messages
ADVANCED USB	USB	Download data log from controller to USB drive	/	- RS485 link to EMEC instruments - Data Log recording on USB drive
MODBUS	PLC	PLC plant management	/	- PLC connection output for reading and modifying parameters via RS485 or TCP/IP

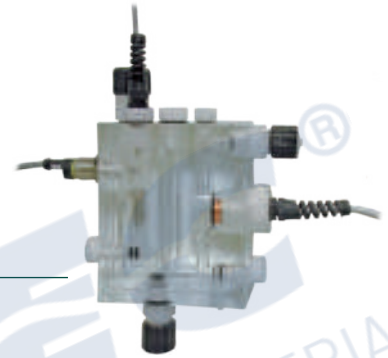
You can CUSTOMIZE configurations adding external modules. Mixed configurations allows to connect instruments to ERMES software in multiple ways: directly, locally and remotely. Those configurations extend connection capacity. If you already use EMEC instruments and you want use ERMES web application, contact our customers service.

MEASUREMENT SYSTEMS

PROBES

SCL - Closed amperometric cells

Free chlorine (organic and inorganic) for fresh water, total chlorine, chlorine dioxide, hydrogen peroxyde, ozone, peracetic acid, bromine.



ECL - Open amperometric cells

Free chlorine (organic and inorganic) for fresh water and salt water.

EPH - pH probes

Working temperature max 70° C
Working pressure max 7 bar



ERH - ORP probes

Working temperature max 70° C
Working pressure max 7 bar

EOLUM - Dissolved Oxygen probes

Working temperature max 50° C
Working pressure max 10 bar



ETORB2 - Turbidity probes

Working temperature max 40° C
Working pressure max 2 bar



ETRC - Inline Fluorometer

Working temperature max 50° C
Working pressure max 7 bar



PROBES



EFL - Fluoride ion probes
Working temperature max 70° C
Working pressure max 7 bar

ECDHL - Conductivity, Platinum electrodes
Working temperature max 70° C
Working pressure max 7 bar

ECDC - Conductivity, Graphite electrodes
Working temperature max 60° C
Working pressure max 7 bar

ECDI - Conductivity, Stainless Steel electrodes
Working temperature max 60° C
Working pressure max 7 bar

EICD - Conductivity Stainless Steel probes
Working temperature max 130° C
Working pressure max 15 bar

ECDIND PT - Inductive Conductivity probes
Measuring range up to 300,00 mS
Working temperature max 85° C
Working pressure max 8 bar
L 151.00 mm Ø 44.70 mm

ECDSIND PT - Inductive Conductivity probes
Measuring range up to 10,00 mS
Working temperature max 85° C
Working pressure max 8 bar
L 105.00 mm Ø 32.70 mm



MEASUREMENT SYSTEMS

PROBES ACCESSORIES

NPED



Off-line probe holders.
Working temperature 0°/50° C
Maximum pressure 5 bar

PEF



Off-line probe holders for closed amperometric cells.

PEL



In-line probe holders.

NFIL



Filters.
Maximum temperature 60° C
(30° C NFIL/CA)
Filtration degree 60 µ / 150 µ

PEC



Immersion probe holders.
Optional compressed air or water self cleaning system
(automatic or manual control).

MANIFOLD



With flow sensor as well as housing for the conductivity probe.
Optional motorized valve, two injection points and even additional measurement probes

Maximum pressure 8 bar
Maximum temperature 75° C

BUFFER SOLUTIONS



Buffer solutions for probe calibration.

CUSTOMIZED SOLUTIONS

MIXING AND DOSING STATION / SKID

MIXING AND DOSING STATION

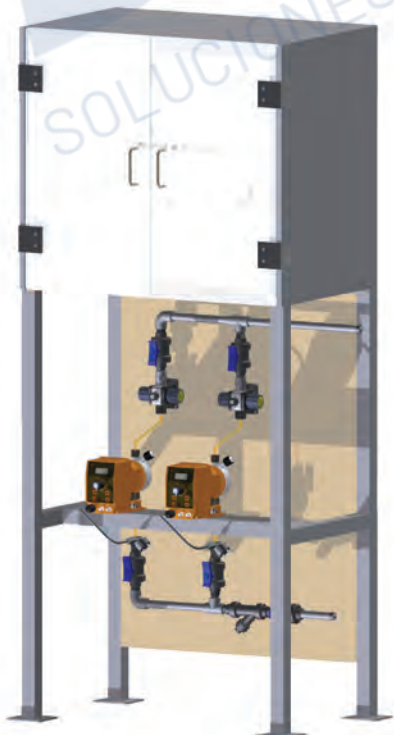


Storage, dosing, all regulation in one single system.
Dosing stations are assembled to include:

- > Dosing pumps
- > Suction lances
- > Mixer
- > Water makeup valve
- > Water bleed valve

Dosing stations are complete solutions ready to go.

PLANTS ON SKIDS OR IN CUSTOM-MADE CABINS



The Stainless Steel or plastic skid is designed and built on client requirements.
In addition to the solution on skids, it is possible to create dosing plants in a cabin, screen guard or with window.

Electric control panels designed to control all the assembled solution.
The final product includes electrical and piping hook-ups ready for installation.

CUSTOMIZED SOLUTIONS

POOLBRAVO



POOLBRAVO is a turnkey product available in several configurations to immediately and easily manage the main parameters concerning water treatment in swimming pools, in order to optimize the dosing and consumption of the needed chemicals.

its elegant cover makes POOL BRAVO suitable for any installation context and, besides safeguarding from accidental liquid loss, preserves at the same time the cleanliness of the inner components and their integrity.

The LD multiple reading digital system inside POOLBRAVO gives you the complete control over the measuring parameters and over the dosing of chemicals, besides being easy to use thanks to the LCD display and the ENCODER control knob that makes simple to browse through its configuration menus. Complete control also comes from the wide range of probes that can measure hydrogen peroxide, oxygen, bromine, chlorine, ozone, peracetic acid and chlorine dioxide.

A colored LED light is installed on PEF probe-holder in order to quickly signal, through an opening on the cover, specific operation statuses or possible alarms according to the color of the light.

EMEC exclusive online system ERMES enables you to remotely control and regulate POOLBRAVO from any smartphone or PC, so to keep the status of your swimming pool always under control, wherever you are.



POOL BRAVO
+ ACID PUMP
+ CHLORINE PUMP



POOL BRAVO
+ ACID PUMP
+ CHLORINE PUMP
+ ANTI-ALGAE PUMP



POOL BRAVO
+ ACID PUMP
+ CHLORINE PUMP
+ FLOCCULANT PUMP

ALL MODELS ARE AVAILABLE WITH ECL6 OPEN AMPEROMETRIC CELL OR WITH SCL3 CLOSED AMPEROMETRIC CELL



CUSTOMIZED SOLUTIONS

ANTI-LEGIONELLA

Sanitary hot water lines disinfection

- | Easy maintenance
- | Automatic re-priming
- | Tailor-made solutions
- | Custom panels for specific treatments
- | Remote Control



Sample panel



POOLS & SPA

Complete system for reliable protection

- | Multiple parameters measurement and control
- | Complete control and dosing systems for pH, ORP, Free chlorine, Chlorine, Combined chlorine, Temperature, Bromine, Ozone, Flocculant and Algicide
- | Scent and essences dosing, foot-bath disinfection systems, dechloration system for filters cleaning waters
- pH and active oxygen measurement and control
- | Remote Control



Sample panel

CUSTOMIZED SOLUTIONS

DRINKING AND WASTE WATER

Water treatment for a cleaner, safer, better tasting and better smelling water

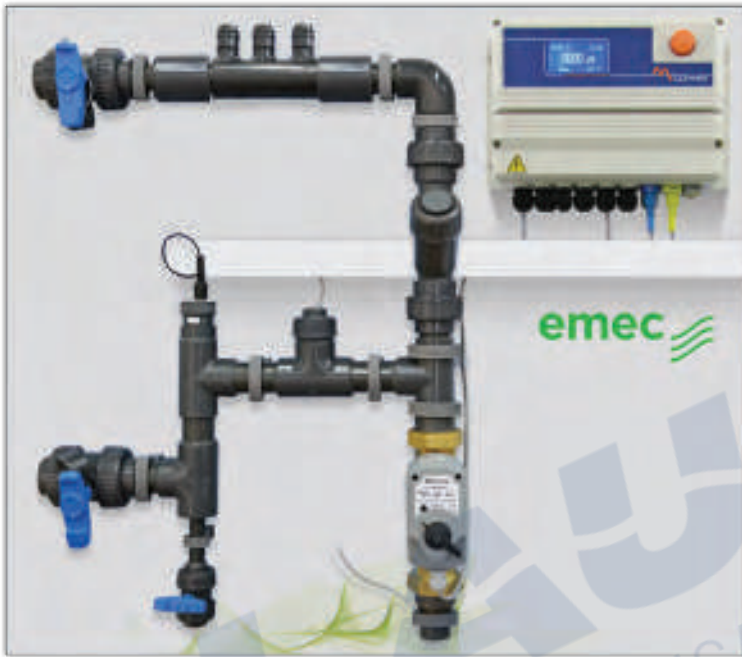
- | Chlorination system
- | Pre-treatment and final disinfection of potable waters
- | Disinfection with sodium hypochlorite or calcium hypochlorite
- | Real time monitoring
- | Remote Control



Sample panel



COOLING TOWERS



Sample panel

Cooling towers & Industrial water treatment

- | Efficient measuring system
- | Complete monthly report
- | Accurate conductivity control
- | Pre-assembled skids
- | Remote Control



Sample panel



www.blautech.com

BLAUTECH[®]

SOLUCIONES HIDRÁULICAS PARA LA INDUSTRIA

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