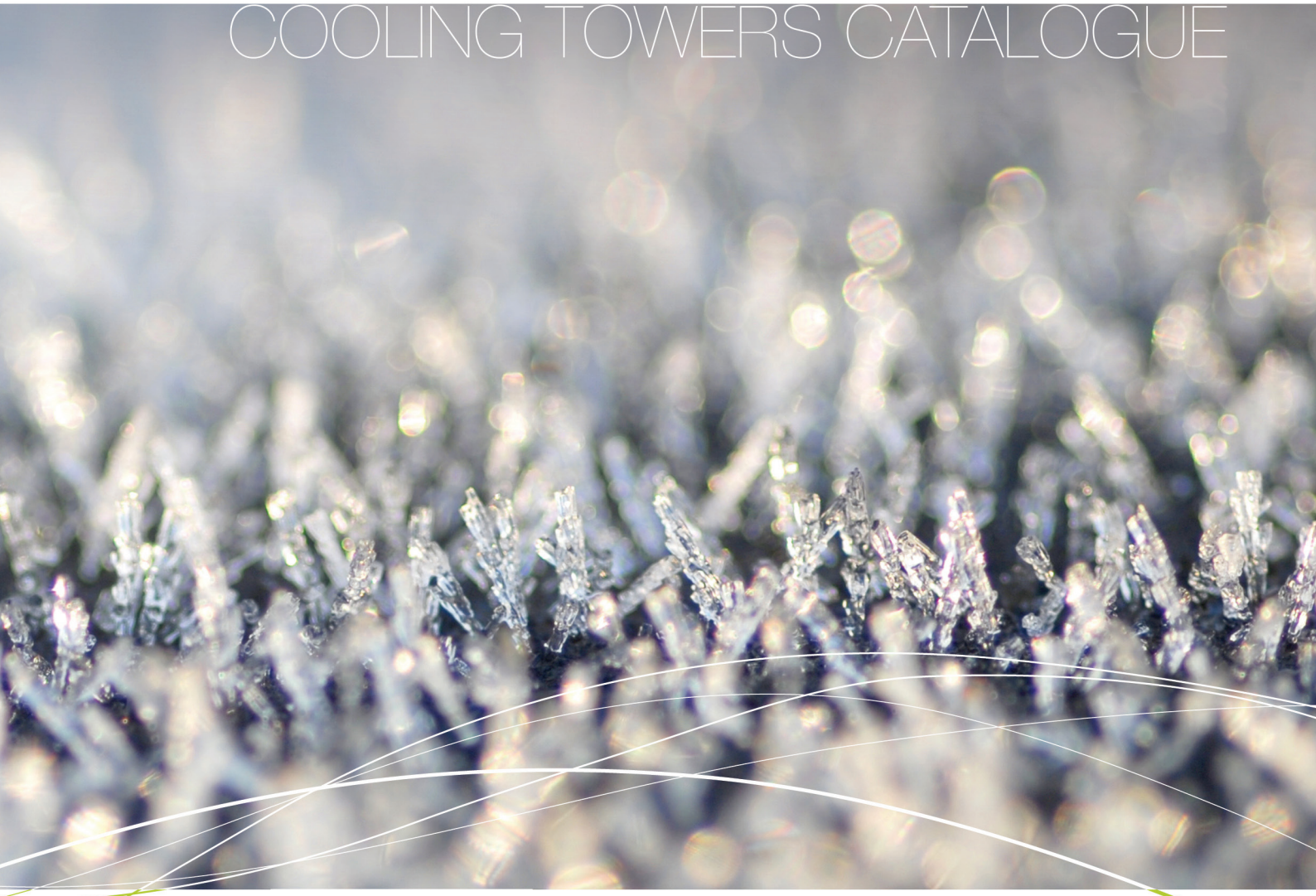
COOLING TOWERS CATALOGUE



EMEC

INNOVATIVE EXPERIENCE

EMEC

THIRTY YEARS OF LEADERSHIP

EMEC ranks among Italy's top, consolidated industrial actors in the field of electronic control systems for fluids metering and management applications. Our products are designed and manufactured for both industrial and small-scale applications.

We are an all-Italian business entity with a clear strategic outlook, right from the outset, striving to merge design innovation with a long-term industrial footing. Our high-precision, hi-reliability products are entirely designed and assembled at our Rieti facilities.

EMEC's reputation as a market leader is expanding both in Italy and internationally, boosting demand for our quality, Italian designer products.

QUALITY FIRST

Our products are supported by passion and a solid industrial background. At EMEC, we have always sought to identify and seize investment opportunities, committing our resources to technology and human resources.

That key to our success - and what sets us apart from market competitors - is our complete control of the production cycle, reliant on specialist business set-ups and resources. Our approach feeds into all aspect ahead of end product delivery: systems design, component production and assembly, software programming and final testing. In line with total quality commitments, we provide installation and maintenance specialists with up-to-date training for both our household and industrial products.

Our retail and commercial units operate with a technical mindset, encompassing a firm grounding in all aspects of design and production; as such, they stimulate product innovation and enhancements based on Customer requirements, feedback and field experience. That approach makes us ideal partners when it comes to delivering targeted solutions to specific requirements. Our claims are anything but overstated: complete control, to us, is the only viable approach to ensuring total product quality and effective service delivery.

A CONSTANLY EVOLVING WORLD

Our 30-year industrial footing has bred constant improvements in all our products, expanding range and functions. Our range of products is currently implemented in a broad range of settings:

- Pools
- Saunas
- Industrial water treatment
- Drinking water treatment
- Irrigation
- Chemical industry
- Processing industry
- Cooling towers
- Refineries
- Car wash

SUSTAINABILITY

Respecting and safeguarding the environment are the core values underpinning our business. In keeping with that commitment we engage in and promote all actions designed to curb the environmental impact of our processes, products and raw materials, on a life-cycle basis. Our company implements an Environmental Management System compliant with UNI ENI ISO 14001 standards, subject to ongoing updates.

Our goal is to curb atmospheric emissions, rationalise water consumption and enact appropriate waste management policies. Environmental impact assessments cover new products, process innovations and public tenders.

We are committed to providing our employees and staff with appropriate information and training concerning our company policy and its implementation with respect to both the workplace and our products.

CERTIFIED SKILLS AND VALUES

EMEC's values and reliability are the result of a long-standing commitment to quality and detail. We testify to that commitment through ongoing human resources training, rigorous abidance by production benchmarks, and concerted efforts to curb all employee health hazards.

Our pledge is a firm one and is backed by our policy implementation and investment goals. Our global quality approach matches our market standing and is certified by the world's leading certification institutes.

qualityaustria
SYSTEM CERTIFIED
ISO 9001:2008
OHSAS 18001:2007
ISO 14001:2004

CERTIFIED IQNet MANAGEMENT SYSTEM

TESTED AND CERTIFIED WaterQuality

C UL US
LISTED
3JBM

EMEC WORLDWIDE

COOLING TOWERS CATALOGUE

1. Dosing Pumps

2. Control Instruments and Disinfection Systems

3. All-in-one solutions

4. Accessories

Dosing Pumps

Flow Control

MULTIFUNCTIONS MODE DOSING PUMPS
(Constant, Divide, Multiply, PPM, Batch, Volt, mA, %, ml/q), stand-by* and flow sensor input*, alarm output** and level control.

CONSTANT MODE DOSING PUMPS
Constant mode dosing pumps with level and flow control. Double frequency scale.

AMS MF

AMS PLUS

Stroke length adjustment
Stroke speed adjustment

PRESSURE	FLOW
7 bar	20 l/h
3 bar	40 l/h
2 bar	60 l/h

KMS MF

K PLUS

Stroke length adjustment
Stroke speed adjustment

PRESSURE	FLOW
2 bar	18 l/h
5 bar	10 l/h
20 bar	1 l/h

TMS MF

TCL

Stroke speed adjustment

PRESSURE	FLOW
4 bar	20 l/h
3 bar	30 l/h
1 bar	50 l/h

VMS MF

VCL

Stroke speed adjustment

PRESSURE	FLOW
5 bar	1 l/h
10 bar	4 l/h
3 bar	10 l/h
2 bar	17 l/h

*Not available on VMS MF
**Level Alarm option availabel on VMS MF and VCL

Complete cooling tower control systems

Conductivity - Inductive conductivity - pH - ORP - Cl_2 + °C measurement and control

CENTURIO TOWER

5 SELF INPUT CONFIGURATION CHANNELS

- CONDUCTIVITY - CONTACT OR INDUCTIVE
- pH
- ORP
- CHLORINE
- TRACERS
- MA INPUT

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

Complete cooling tower control systems

Conductivity - Inductive conductivity - pH - ORP - Cl_2 + °C measurement and control

MTOWER PLUS (3 channel series)

MTOWER PLUS control instruments are a series of fully feature control systems for cooling towers. They manage simultaneously **three parameters**: pH or ORP, chlorine, conductivity or inductive conductivity (to specify on order) and temperature. Probes are not included. They can be remotely controlled through the exclusive web management system ERMES.

Fully feature cooling tower controller. Three parameters control:

- Conductivity or Inductive conductivity (specify on order)
- pH or ORP
- Chlorine
- Temperature (on all models, regardless of the configuration)

Instruments have:

- Widescreen lcd display and easy control by encoder wheel
- Current feed & bleed display
- Local & remote control
- Simultaneous multiple view for probes reading
- Permanent data storage with system log
- Stand-by input
- mA output (optional)
- Different 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 and alarms.

Options:
- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- WIFI
- 2G/3G modem
- Modbus

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

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

Complete cooling tower control systems

Conductivity - Inductive conductivity - pH - ORP - Cl_2 + °C measurement and control

MTOWER 2 CH (2 channel series)

MTOWER 2CH control instruments are a series of fully feature control systems for cooling towers. They manage simultaneously **two parameters**: pH or ORP or chlorine, conductivity or inductive conductivity (to specify on order) and temperature. Probes are not included. They can be remotely controlled through the exclusive web management system ERMES.

Fully feature cooling tower controller. Two parameters control:

- Conductivity or Inductive conductivity (specify on order)
- pH or ORP or Chlorine
- Temperature (on all models, regardless of the configuration)

Instruments have:

- Widescreen lcd display and easy control by encoder wheel
- Current feed & bleed display
- Local & remote control
- Simultaneous multiple view for probes reading
- N.O./N.C. Levels selection,
- Inhibitor proportional dosing to wm1, wm2 or both
- "Biocide 2" proportional dosing to water meter
- Programmable biocide feed (max 1 per day), selection stop/no alarms
- for high/low feeding
- Working mode auto/manual/stop
- Permanent data storage with system log
- Stand-by input
- mA output (optional)
- Different working modes (on/off, impulsive proportional, proportional
- pwm and fixed pwm)
- Pre-bleed (educed 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 and log report (hourly, daily, weekly, monthly).

Options:
- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- WIFI
- 2G/3G modem
- Modbus

MTOWER CD/PH: controller for conductivity and pH
MTOWER CD/RH: controller for conductivity and ORP
MTOWER CD/CL: controller for conductivity and Chlorine
MTOWER CD/TRC: controller for conductivity and Tracers

Single parameter digital controllers

Conductivity + °C measurement and control

MTOWER (Single Channel series)

Fully feature cooling tower controller:

- Conductivity or Inductive conductivity (specify on order)
- Temperature (on all models, regardless of the configuration)

Instruments have:

- Widescreen lcd display and easy control by encoder wheel
- Current feed & bleed display
- Local & remote control
- Simultaneous multiple view for probes reading
- N.O./N.C. Levels selection
- Inhibitor proportional dosing to wm1, wm2 or both
- "Biocide 2" proportional dosing to water meter
- "Biocide 1" proportional dosing to water meter
- Programmable biocide feed (1 per day)
- Selection stop/no alarms for high/low feeding
- Working mode auto/manual/stop
- Permanent data storage with system log
- Stand-by input
- mA output (optional)
- Different working modes (on/off, impulsive proportional, proportional
- pwm and fixed pwm)
- Pre-bleed (educed 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 and log report (hourly, daily, weekly, monthly).time), product level, flow

Options: USB for data log recording, Current Output (0/4 - 20 mA), Ethernet, WIFI, 2G/3G modem, Modbus.

LDS Series

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: USB for data log recording, Current Output (0/4 - 20 mA), Ethernet, WIFI, 2G/3G modem, Modbus.

LDSCD Conductivity measurement and control
LDSCDIND Inductive conductivity measurement and control (ECDINDPT probe)

Multi parameters digital controllers

Simultaneous parameters measurement and control

LDPHXX Series

pH / Conductivity / Inductive conductivity + Temperature

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, 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, mA output (option)

Options: USB for data log recording, Current Output (0/4 - 20 mA), Ethernet, WIFI, 2G/3G modem, Modbus.

LDPHCD: pH (0÷14) - Conductivity (0÷300,0 µS; 0÷3000 µS; 0÷30,00 mS; 0÷300,0 mS) - °C (0÷99,9)
LDPHCDIND: pH (0÷14) - Conductivity (0÷3,000 mS; 0÷30,00 mS; 0÷300,0 mS) - °C (0÷99,9)

MAX5 Series

pH / Total Chlorine / Free chlorine / Combined Chlorine / ORP / Turbidity Conductivity / Inductive conductivity / Bromine / Ozone + Temperature

MAX5 control instrument is a controller system that meets a wide range of applications. It is a multiple digital controller system for managing up to 5 channels that can be programmed to control: pH, ORP, chlorine (total, free and combined), chlorine dioxide, hydrogen peroxide, ozone, peracetic acid, turbidity, conductivity, dissolved oxygen and temperature.
MAX5 versatility offers different programming solutions: each channel can be programmed on specific user requirement.

Instrument has:

- Widescreen lcd display and easy control by encoder wheel
- 6 Setpoints relais output (on/off, pid or pwm) renamable
- 6 Impulsive proportional output renamable
- 1 Probe cleaning output
- 5 Level tank input renamable
- 5 Timer for flocculant/algicide dosing renamable
- Water meter input for water restore
- Temperature probe input
- Alarm output
- Ermes web communication
- Local & remote control
- Multiple probe readings can be viewed
- Probe readout menu and check up
- Log menu for enable/disable log on output
- Permanent data storage with system log
- Stand-by input
- Alarms
- Totalizer for instant flow rate when connected to a meter
- 6 mA output (optional).

Ranges:
pH: from 0 to 14 pH
ORP (ORP): from 0 to 1000 mV
Total Chlorine: from 0 to 10 mg/l
Free chlorine: from 0 to 10 mg/l
Combined Chlorine: from 0 to10 mg/l
Bromine: from 0 to 10 mg/l
Turbidity: from 0 to 9,999 NTU
Temperature: from 0 to 100 °C
Conductivity: from 0 to 300 mS

Options: USB for data log recording, Current Output (0/4 - 20 mA), Ethernet, WIFI, 2G/3G modem, Modbus.

*On order please specify parameters and chlorine probe model.

Disinfection Systems

Controlled pressure Chlorine Dioxide generator

LOTUS MINI

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.

RANGE: 8-20 g/h MAX CAPACITY: 480 g/day

ADVANTAGES

- **Reaction at controlled pressure**
- 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.

FUNCTIONS

- 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

FEATURES

- ClO_2 concentration: 2 gr/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)

Disinfection Systems

Controlled pressure Chlorine Dioxide generator

LOTUS MAXI

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.

RANGE: 80-1000 g/h MAX CAPACITY: 24000 g/day

ADVANTAGES

- **Reaction at controlled pressure**
- **Large-scale applications**
- 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 MAXI with gas sensor detection.

FUNCTIONS

- 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

FEATURES

- ClO_2 concentration: 2 gr/l
- Flow control input (flow alarms)
- Tank level control (level alarms)
- HCl (red) and $NaClO_2$ (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)

Disinfection Systems

Atmospheric pressure Chlorine Dioxide generator

LOTUS AIR

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 (NaClO2 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.

RANGE: 10-60 g/h MAX CAPACITY: 1440 g/day

ADVANTAGES

- **Reaction at atmospheric pressure**
- 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 MINI with gas sensor detection.

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

FEATURES

- 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)

Remote measurement and control

Modem and external adapters for remote control of: LD, MAX5 and MTOWER controller series

BT CEL

Modem for mobile network. IP65.

BT ETH

Ethernet controller for standard RJ45 network. IP65.

BT WiFi

Module for WIFI connection. IP65

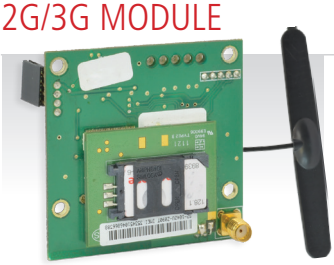
BT USB

USB module for USB datalog recording. IP65.

BT MODBUS

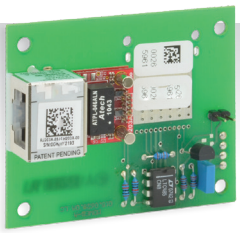
Serial communication module for PLC connection.

2G/3G MODULE



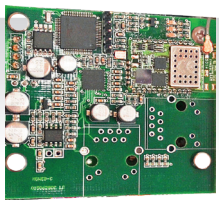
Internal 2G/3G modem for LD encoder and MAX5 controllers.

ETHERNET MODULE



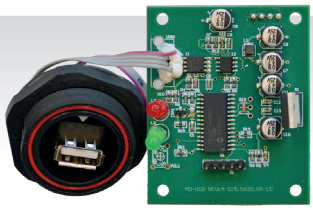
Internal standard ETHERNET (RJ45) controller for LD encoder and MAX5 controllers.

WiFi MODULE



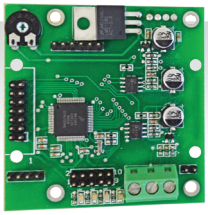
Module for WIFI network. IP65.

USB MODULE



Module for USB connection. IP65.

MODBUS MODULE



MODBUS RTU module.

Remote measurement and control

ERMES
WEB BASED APPLICATION FOR EMEC INSTRUMENTS COMMUNICATION

ADVANTAGES

- reduces plant intervention and inspections.
- reports on the current status of the network's devices and conr (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 char 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:

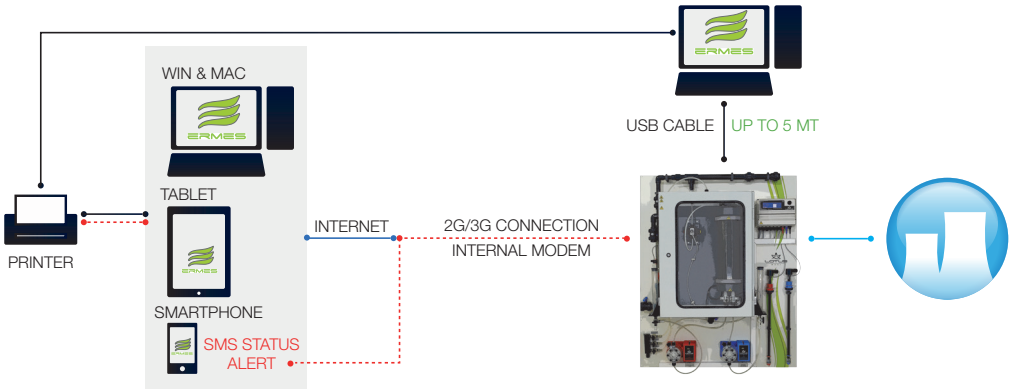
- CENTURIO TOWER
- MAX5
- LD MULTICHANNEL
- LD WITH ENCODER (wheel)
- MTOWER
- WD

AVAILABLE CONFIGURATIONS

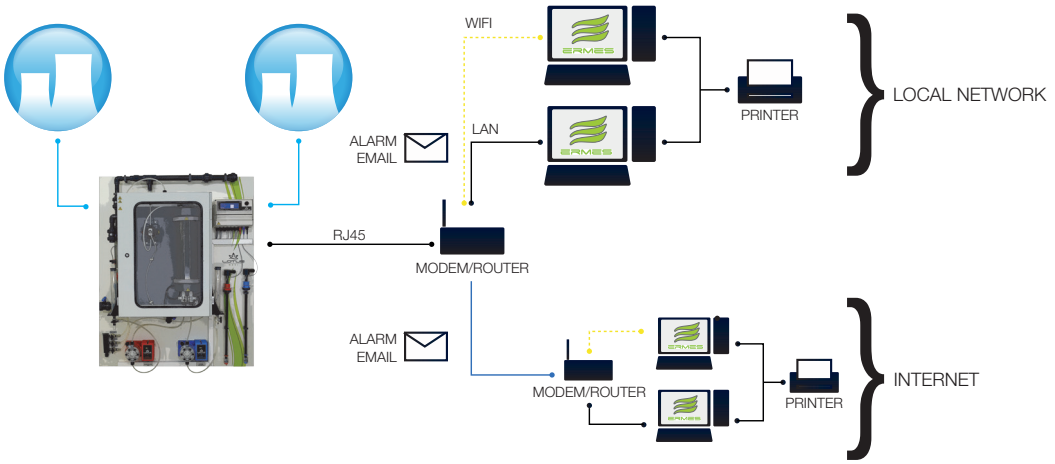
CONFIGURATION	FEATURES	CONNECTION TYPE	REQUIREMENTS	FUNCTIONS
BASIC	/	Local control	/	- RS485 link to EMEC instruments
ADVANCED USB	USB	Download data log from controller to USB drive	/	- RS485 link to EMEC instruments - Data Log recording on USB drive
ETHERNET	LAN	Remote control via ERMES web app (www.ermes-server.com)	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
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.

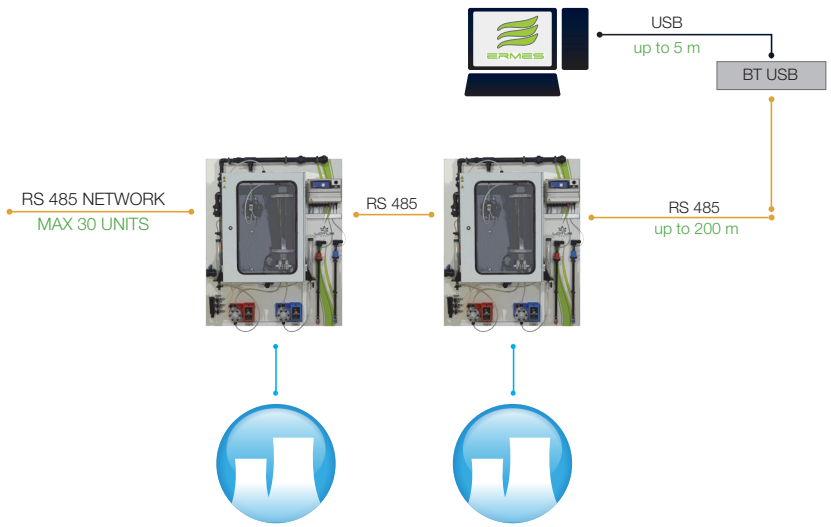
CONFIGURATION EXAMPLE 2G/3G



CONFIGURATION EXAMPLE ETHERNET

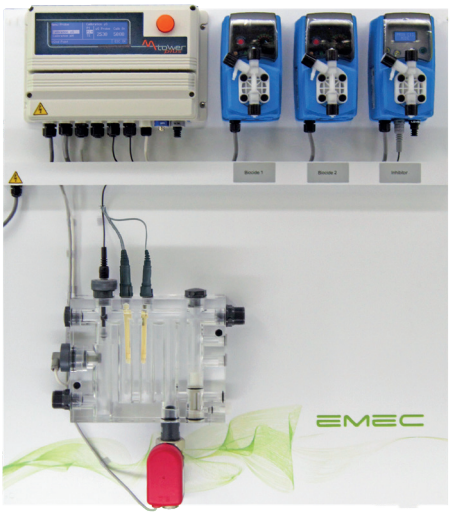


CONFIGURATION EXAMPLE BASIC



All-in-one solutions

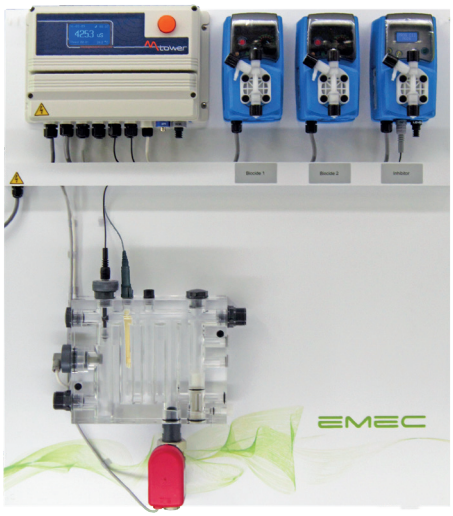
MTOWER PLUS PANELS



Full cooling tower water treatment:

- Dosing pumps for 1 or 2 biocides
- Dosing pump for inhibitor
- pH and conductivity correction
- Chlorine or ORP/Redox correction
- Bleed electrovalve control
- Flow switch
- Input for makeup and bleed water meters

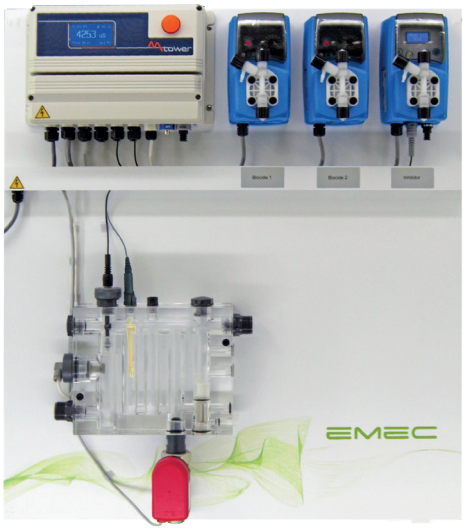
MTOWER CD/RH PANELS



Full cooling tower water treatment:

- Dosing pumps for 1 or 2 biocides
- Dosing pump for inhibitor
- ORP/Redox and conductivity correction
- Bleed electrovalve control
- Flow switch
- Input for makeup and bleed water meters

MTOWER CD/PH PANELS



Full cooling tower water treatment:

- Dosing pumps for 1 or 2 biocides
- Dosing pump for inhibitor
- pH and conductivity correction
- Bleed electrovalve control
- Flow switch
- Input for makeup and bleed water meters

CENTURIO TOWER PANELS

Full cooling tower water treatment:

- Blow down on conductivity
- Inhibitor
- 2 biocides on timers
- Biocide on direct reading of Chlorine, Bromine or Chlorine Dioxide
- Biocide on ORP
- pH adjustment
- Tracer measurement
- Water meter make up and blow down
- Flow switch

Accessories

EPHS

pH electrode for pressures up to 7bar/70°C (3.5bar/80°C).
0.8m cable. Epoxy body.
Minimum 100µS.

ERHS

ORP electrode for pressures up to 7bar/70°C (3.5bar/80°C).
0.8m cable. Epoxy body.
Minimum 100µS.

ECDINPT

Inductive conductivity measurement probe (0/3,000mS; 0/30,00mS; 0/300,0mS).
PEEK body. Max working temperature/pressure 8bar/85° C. In-line assembly.

SCL17

Chlorine dioxide self cleaning amperometric cell, from 0 to 20 mg/l, pH and temperature compensated.

ECDI / EICDC series

Conductivity measurement probe.
PVDF (ECDI) or Stainless Steel (EICDC) body. Stainless steel electrodes (AISI-316).
Max working temperature/pressure 7bar/60° C for ECDI, 5bar/130° C for EICDC.
Standard cable/connector 4 mt.

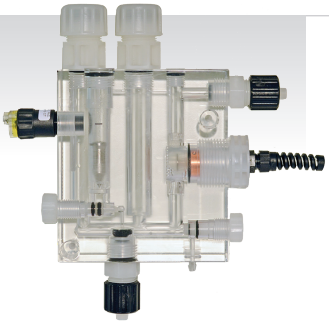
ECDC series

Conductivity measurement probe.
PVDF body. Graphite electrodes.
Working temperature/pressure max 7bar/60° C.
Standard cable/connector 4 mt.
In-line or off-line assembly.

SCL18

Free chlorine amperometric cell (inorganic), from 0 to 20 mg/l, pH and temperature compensated.

ECL6 - ECL12

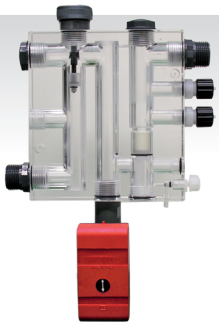


Free chlorine / bromine amperometric celln(organic and inorganic), from 0 to 10 mg/l.
Flow switch and flow adjustment.
Electrodes holder for pH, Redox and temperature. With proximity switch mod. SEPR. 6x8 fittings.
With LED light sold as option.

SBR1/20

Amperometric cell for bromine (reading range from 0 to 20 mg/l), pH and temperature compensated.

MANIFOLDS



Come in a one-piece PMMA design, manifolds have a flow sensor as well as housing for the conductivity probe.
They can be accessorised with a motorized valve, two injection points and even additional measurement probes.
Maximum pressure 8 bar.
Maximum temperature 75° C.

MOTORIZED BALL VALVES

Motorized ball valves servocontrol is available in UNI/ BIDIRECTIONAL version.
It can be combined with 2-way, 3-way and by-pass valves.

NPED-IND / NPED-INDS

Off-line electrode holder for ECDINDPT (NPED IND) or ECDINDSPT (NPED INDS) electrodes.
Max temperature 50° C, max pressure 5bar with flow sensor, 6x8 fittings.
With LED light sold as option.

NPED4-INDS

Off-line electrode holder for 2 epoxy 12 diam. and ECDINDSPT electrodes. N.C. contact.
Max temperature 50° C, max pressure 5bar with flow sensor, 6x8 fittings.

With LED light sold as option

PEC IND

PVC immersion electrode holder for ECDINDPT electrodes.
100 cm length, max 40°C.

PEL IND / PEL INDC

PVC (PEL IND) or PVCC (PEL INDC) in-line electrode holder for ECDIND PT electrodes.
For saddle connection.

PEL IND SS

INOX (PEL IND SS) in-line electrode holder for ECDIND PT electrodes
For saddle connection.

Accessories

MIXVN/8

High speed mixer 1400 RPM.
AISI shaft-PVC coated, different lengths available (630-730-830-930 mm).
Marine impeller, diameter 70mm.

MIXN/8

Slow speed mixer 70/200 RPM.
AISI shaft-PVC coated, different lengths available (630-730-830-930 mm).
3-blade impeller, diameter 150mm.

MIXN/MAN

Manual mixer.
PVC shaft, different lengths available (500-600 and 700-800 mm).
Impeller diameter 130 mm.

MIX "PISTON"

Manual mixer.
PVC shaft, different lengths available (500-600 and 700-800 mm).
Impeller diameter 130 mm.

LASP

Suction lances with level control, for tanks up to 25 liters.

LASP

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

LINIR

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

PVDF INJECTION VALVE

PVDF made injection valve with 1/2" or 3/4" fittings.

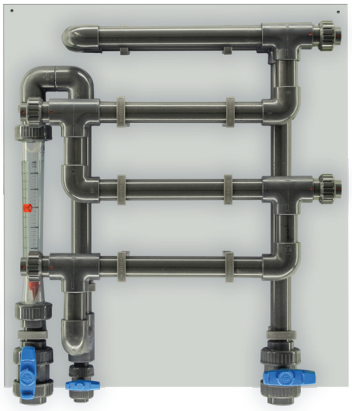
PIPELINE MANIFOLD

1 1/4" pipeline manifold.

Included:

- motorized valve (1 1/4")
- ball valve water inlet
- ball valve water outlet
- no-return valve
- flow sensor
- 3 injection points
- cross connection for conductivity and pH probe (Redox on request)

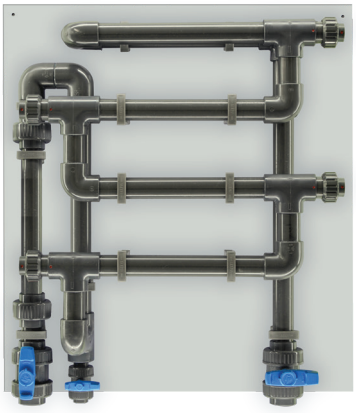
CORMIS4



System for pipes corrosion control. Flow-meter included. With 4 specimens to be extracted to measure thickness loss (weight).1 pH on/off output:

- PVC body.
- Pipes: DN40 - PN16.
- 4 corrosion coupon points.
- Panel mounting sizes: 600 mm x 900 mm.
- Quick connect sample points (no tools tequired).
- Inlet/outlet isolation valves.
- Flow indicator.
- Y-Strainer (option).
- Drain valve.
- Temperature rating: max 40°C (104°F).

CORMIS4-E



System for pipes corrosion control. With 4 specimens to be extracted to measure thickness loss (weight).1 pH on/off output:

- PVC body.
- Pipes: DN40 - PN16.
- 4 corrosion coupon points.
- Panel mounting sizes: 600 mm x 900 mm.
- Quick connect sample points (no tools tequired).
- Inlet/outlet isolation valves.
- Flow indicator.
- Y-Strainer (option).
- Drain valve.
- Temperature rating: max 40°C (104°F).

Accessories

MF MULTIFUNCTION VALVE

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

LEVEL PROBE with FOOT FILTER

Level probe with REED TYPER CONTACT. High temperature resistant, not influenced by visosity, opacity, conductivity or dielectric costant (0 and 60°C).

CHEMICAL TANKS & SAFETY BUNDS

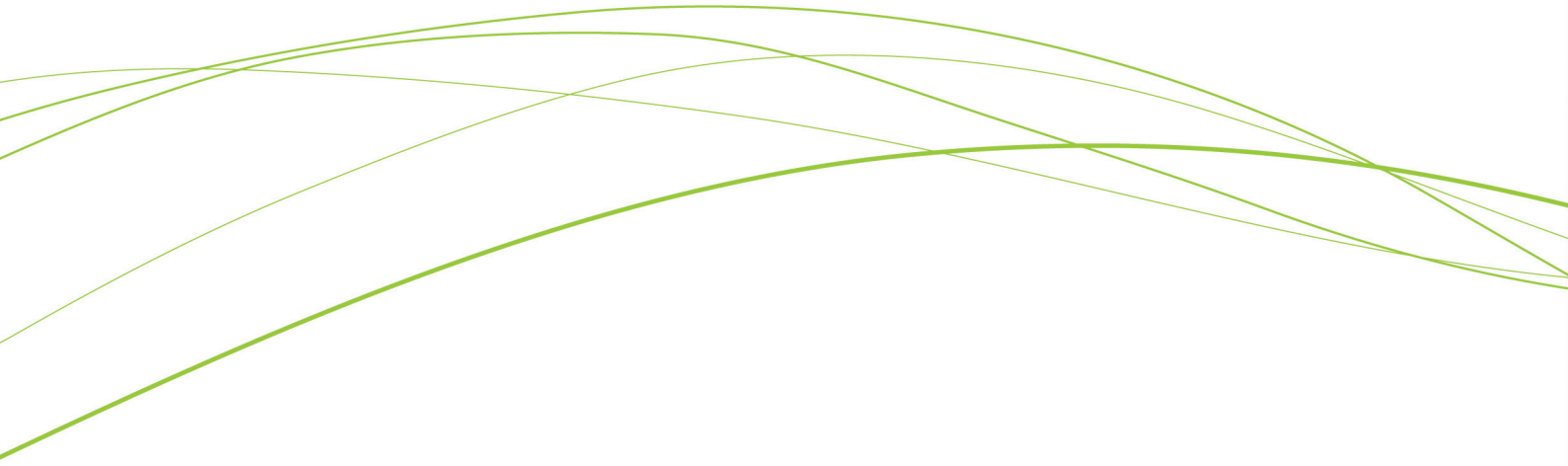
Chemical tanks made of polyethilene, UV resistant with safety bunds. For dosing pumps and mixers.

DOSING STATIONS

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.



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