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tel. +39 055 756645 fax + 39 055 756697
web site: www.chemitec.it
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Doseuro are the UK and Ireland's exclusive distributor for Chemitec's famous range of chemical process controllers and instruments.

Chemitec produce the following product ranges:

- ACP 4001 – Multiparametric process controllers to determine levels of chlorine, pH, Redox and temperature.
- ACP 4004 – Level / flow meter.
- ACP 4022 – Conductivity and temperature analyser-controller.
- ACP 4037 – pH or Redox and temperature analyser-controller.
- ACP 4061 – Nephelometric turbidity measurement controller.
- ACP 4062 – Turbidity analyser-controller.
- ACP 4063P – Turbidity and sludge concentration analyser.
- ACP 4082 – Dissolved oxygen and temperature analyser-controller.
- ACP 4122 – Conductivity analyser-controller.
- ACP 4137 – pH and Redox meter.
- SK1040 GSM Alarm – GSM alarm logger.
- MAXX GmbH – Complete water sampling system (information page in Italian).

If you require any further information, please do not hesitate to contact us:

Addr: Doseuro (UK) Limited
Unit 8, East Road Industrial Estate
East Road
Sleaford
Lincolnshire
NG34 7EH

Tel: +44 (0) 1529 300 045
Fax: +44 (0) 1529 410 967

Email: sales@doseuro.co.uk
Web: http://www.doseuro.co.uk

We would welcome the opportunity to tender against your next dosing requirement.

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Chemitec
water control instruments

µACP 4001

Multi-Parameter Control Unit for contemporary determination of: Free Chlorine (Photometric system) , pH, Redox and Temperature

Graphic LCD back lighted Display for Simultaneous visualization of: Chlorine/pH/Redox and temperature measurement, analogue and digital output status. 4 digit keyboard for programming. Status of Phometric cycle

Internal Data Logger 4 Mbit flash memory (16.000 records). Tabular or graphic data display with maximum, minimum and average values.

PID regulation to be set for pH measurement

no.4 Analogue outputs. freely programmable within the measuring range.

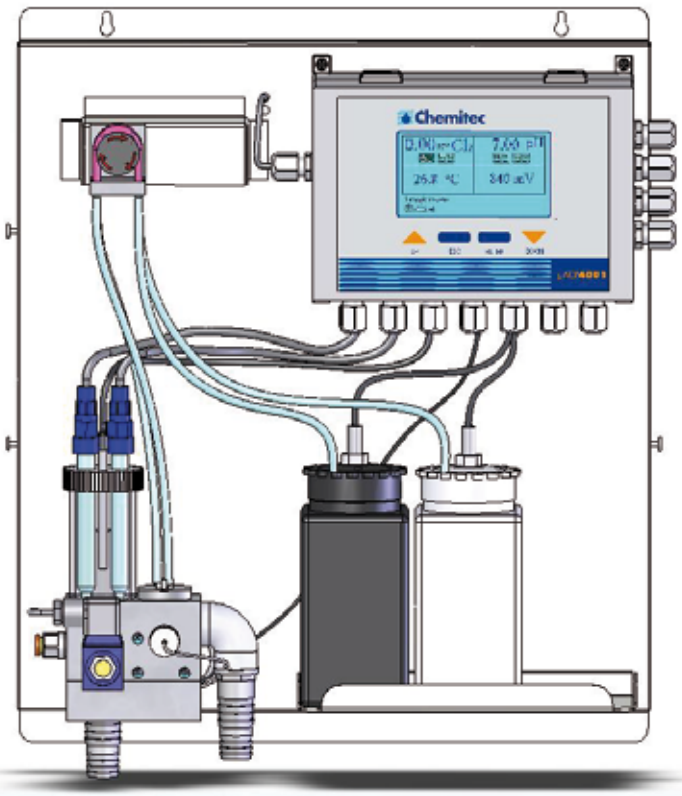
no. 5 + 1 digital output for threshold Rising or falling excitation with hysteresis and timing regulation

n.1 digital output for alarm to be set for: minimum/maximum value, delayed alarm, malfunctioning, sensor and lamp check, lack of water, lack of reactives

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Manual activation of the whole outputs, analogue and digital, for simulation.



µACP **4001**

Multi-Parameter photometric Control Unit for contemporary determination of: Free Chlorine (Photometric system) , pH, Redox and Temperature

Technical Features

Measurement range

Free chlorine: 00.00 ÷ 05.00ppm Cl2 - Resolution: 0.01ppm - Accuracy: 1% f.s. (colorimetric method with DPD)
pH: 00.00 ÷ 14.00 pH - Resolution: 0.01 pH – Accuracy: 1%f.s.
Redox: ± 1500 mV - Resolution: 1 mV – Accuracy: 1%f.s.
Temperature: 00.0 ÷ 50.0 °C - Resolution: 0.1°C – Accuracy: 1% f.s.

Graphic display

LCD STN 240x128 backlighted.
Visualisation of: measurements (simultaneous of 4 values + trend line) ,
Digital outputs condition, storage condition, malfunctions.
Programming through keyboard with 4 bubble keys

Internal Data Logger

Flash 4 Mbit storage equal to 16000 recordings
Recording interval: 00:00 ÷ 99:99 min
Type: circular / filling
Visualisation: table/chart

nr. 4 Analogue outputs

Quantity: ppm Cl2 pH, Redox , Temperature.
Typology: 0.00 / 4.00 ÷ 20.00 mA galvanically isolated
Limit programming: lower / higher / Inversion
Max load: 500 Ohm
Output alarm according to NAMUR 2.4 mA (with range 4/20mA)

n.5 Relays Outputs of Set point

n.2 for Chlorine + n.2 for pH + n.1 for Redox measurement
Programming of Hysteresis and operational time: 000 ÷ 999 sec.
Or daily activation on a hour basis: with programming of switching on and off hour
Relay max resistive load 5A at 230Vac

n.1 Alarm Relay Output

ON-OFF cumulative for: Min/Max, set point delay, defects (lack of sample water, reagents exhaustion, burnt projector, dirty cell)
Delay time: 00:00 ÷ 59:99 mm:ss at minimum step of 15 seconds
Threshold disabling: active
Relay functioning: closed / open
Relay max resistive load 5A at 230Vac

nr.1 Auxiliary Relay Outputs

Programmable as: Temperature measurement, timed activation for cell cleaning (programmable activation time and frequency)
Relay max resistive load 5A at 230Vac

Digital Input

Contact feed at 24Vdc for dose disabling

Analogue Input

0/4 ÷ 20mA for auxiliary measurements

RS485 Serial Output

MODBUS RTU protocol with programmable velocity 1200 ÷ 38400 Baud Rate. for set-up, Real Time condition, or data download

Functioning conditions

Operational Temperature 0÷50°C
Storage and Transportation -25÷65°C
Humidity 10-95% not condensed
Power Supply/Electric Protection
Power supply 90÷260Vac/dc 50-60Hz
– Average absorption 66 W

Housing

ABS Single plate housing: Control unit, Peristaltic pump, Downflow photometric cell (for Chlorine measure ment) Complete with pH and Redox electrodes, Temperature sensor. Hydraulic feed: Flow: max 60/lt.
Pressure: max 1 bar

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Chemitec
water control instruments

µACP 4004
Level/Flow meter

Level/Flow measurement
With Ultrasonic or piezometric sensor
Measuring ranges available to be set via keyboard

Temperature measurement
and automatic compensation with NTC sensor.

Graphic LCD back lighted Display
Simultaneous visualization of: measurement, analogue and digital output status. 4 digit keyboard for programming.

Internal Data Logger
4 Mbit flash memory (16.000 records). Tabular or graphic data display with maximum, minimum and average values.

n. 2 Analogue outputs
freely programmable within the measuring range. Second output to be set for:level 1 or 2 differential level/temperature

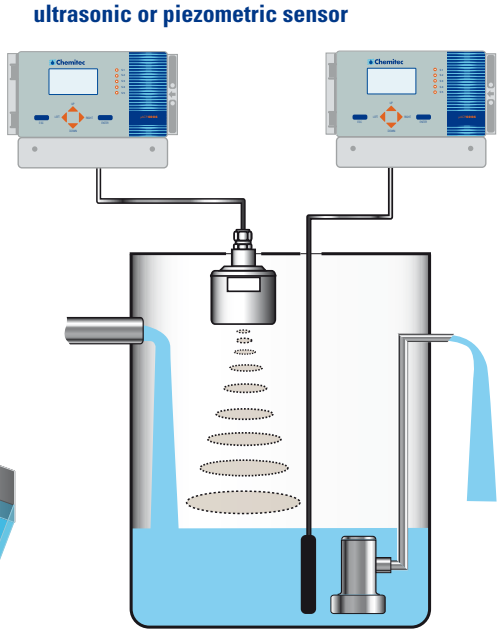
n. 5 digital output for pump control
Rising or falling excitation with hysteresis, rotation or timing functionning.

n.5 digital input
to check pump functioning and stop command

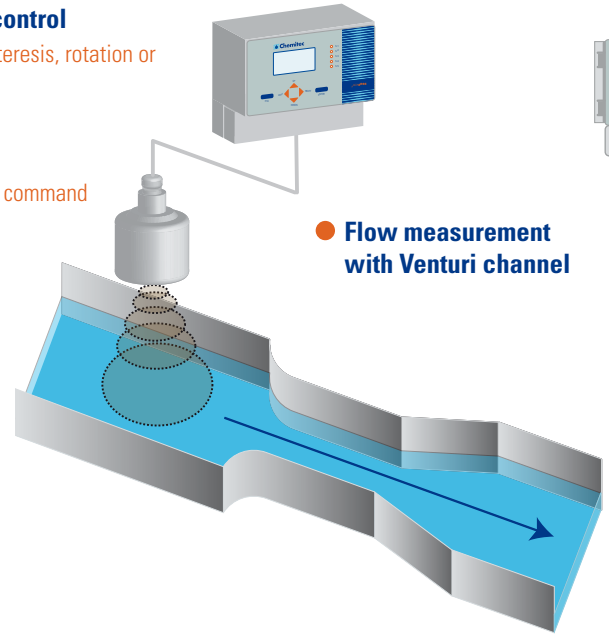
n.1 digital output for alarm
to be set for: minimum/maximum value, malfunctioning,

RS485 Serial output
MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Level measurement with ultrasonic or piezometric sensor



Flow measurement with Venturi channel



Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP

Set point, Alarm, washing cycle, , PID parameter regulation, , temperature compensation, Password, Serial protocol communication, language

CALIBRATION

Automatic set of measuring range and maximum distance, with probe already installed.

ANALOGUE OUTPUT

freely programmable within the measuring range. Second output to be set for:level 1 or 2 differential level/temperature

ARCHIVE

Internal data logging of measuring data. To be set time interval recording and storing type

GRAPHIC MEASURE

Graphic display of measurement records. Time base to be set

MANUAL CONTROL

Outputs manual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4004
Level/Flow meter

MEASURING RANGES
Level : 0.30 ÷ 5.00 / 0.40 ÷ 8.00 / 0.70 ÷ 12.00mt.
In reference with ultrasonic probe connected
Resolution: ± 0.01mt Accuracy: 0.2% f.s.
Temperature: -25 ÷ 75°C Resolution: 1°C Accuracy: 1% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: level/flow and temperature measurement, digital output status. Analogues output values. Recording status and malfunctioning. Pump hours of functioning. Last 6 alarms event
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: level 1/ temperature
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Level 1 / Level 2 / temperature / differential
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower

DIGITAL OUTPUTS
No. 5 for pump command ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: threshold with hysteresis and timing regulation, rotation, timed functioning, daily start, range, differential
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Echo lost, Malfunctionning, Min / Max, time out pump
De-activation Set Point: activate/deactivate in reference with the alarm excitation
Relay position: Normally Open / Normally Close

DIGITAL INPUT
No. 5 for to check pump functioning and stop command
Input supply: 24 Vdc /ac

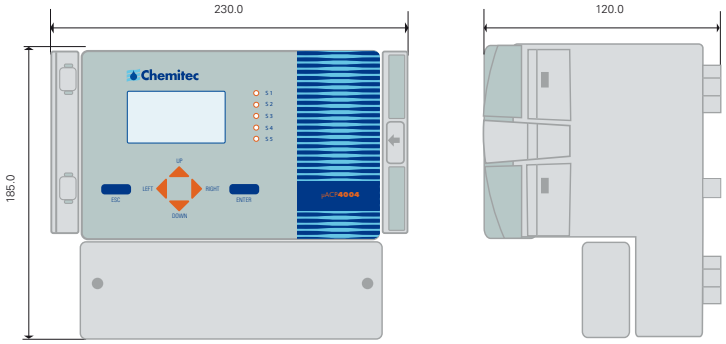
SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 12W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

MOD. µACP 4004

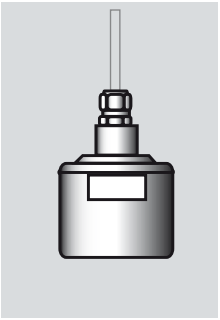
Wall mounting version
Mechanical Protection: Closed IP65 EN60529 – with frontal panel open IP54
Dimension: (L x H x D) 230x185x120mm
Weight: 1.0 Kg
Material: Grey ABS – frontal panel Polycarbonate UV resistant



MEASURING SENSOR TO CONNECT TO µACP 4004 :

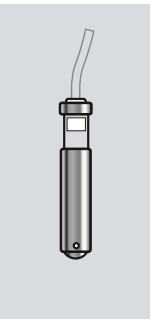
S425 Ultrasonic level sensor

Measuring range:: 0,3 ÷ 5mt (mod. S425/5) /
0,4 ÷ 8mt (mod. S425/8) / 0,7 ÷ 12mt (mod. S425/12)
Accuracy: ± 0.5% v.l. never better than ± 1 mm
Transmission angle: 7°
Temperature compensation: -30÷80°C
Supply : 24 Vdc (by µACP 4004)
Output signal: RS 485
Ambient temperature: - 30 a + 80°C
Pression: 0,5÷1,5bar (absolute)
Mechanical Protection: IP68



S108 Immersible piezometric level sensor

Measuring range: standard 0 ÷ 6mt.
(other to define)
Accuracy: ± 0,35% F.S.
Temperature compensation: 0 ÷ 70°C.
Supply: 12 ÷ 36Vcc
Output signal: 4 - 20mA
Liquid temperature: - 10 ÷ +70 °C.
Mechanical Protection: IP68



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Chemitec
water control instruments

µACP 4022
Conductivity and temperature Analyser - controller

Conductivity measurement
Measuring ranges available to be set via keyboard

Temperature measurement
and automatic compensation with NTC sensor.

Graphic LCD back lighted Display
Simultaneous visualization of: conductivity and temperature measurement, analogue and digital output status. 4 digit keyboard for programming.

Internal Data Logger
4 Mbit flash memory (16.000 records). Tabular or graphic data display with maximum, minimum and average values.

PID regulation
to be set for analogue or digital output (PWM or Frequency)

n. 2 Analogue outputs
freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

n. 2 digital output for threshold
Rising or falling excitation with hysteresis and timing regulation

n. 1 digital output for alarm
to be set for: minimum/maximum value, delayed alarm, malfunctioning, live check

n.1 digital output for automatic cell washing
Rinsing time intervals to be set via keyboard

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Manual activation of the whole outputs, analogue and digital, for simulation.

Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP
Set point, Alarm, washing cycle, , PID parameter regulation, , temperature compensation, Password, Serial protocol communication, language

CALIBRATION
Automatic on two different values

ANALOGUE OUTPUT
Freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

ARCHIVE
Internal data logging of measuring data. To be set time interval recording and storing type

GRAPHIC MEASURE
Graphic display of measurement records. Time base to be set

MANUAL CONTROL
Outputs manual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4022
Conductivity and temperature Analyser - controller

MEASURING RANGES
Condictivity: 00.00 ± 20.00/000.0 ÷ 200.0/0 ÷ 2000µS/00.00 ÷ 20.00 mS
(000.0 ÷ 200.0 mS on request)
Resolution: ± 0.01/ ± 0.1/ ± 1µS/ ± 0.01 mS Accuracy: 1% f.s.
Temperature: -10 ÷ 130°C Resolution: 0.1°C Accuracy: 1% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: conductivity and temperature measurement, digital output status. Analogues output values. Recording status and malfunctioning
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: conductivity
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Temperature / Measurement repetition / PID
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower
Dosing function (P – PI – PID)
Proportional range: 0 ÷ 500%
Integral time: 0:00 ÷ 5:00 min
Derivative time: 0:00 ÷ 5:00 min

DIGITAL OUTPUTS
No. 2 for Threshold ON-OFF Relays - Maximum load 1A at 230Vac
Set Point ON – OFF: 00.00 ÷ 20.00 / 00.00 ÷ 20.00/000.0 ÷ 200.0/0 ÷ 2000 µS/00.00 ÷ 20.00 mS
(000.0 ÷ 200.0 mS on request)
To be set hysteresis and timing regulation: 000 ÷ 999 seconds
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Set Point delay, Malfunctionning, Min / Max, Dead time (live check)
Delay time : 00:00 ÷ 59:99 mm:ss minimum step 15 seconds
De-activation Set Point: activate/deactivate in reference with the alarm excitation
Relay position: Normally Open / Normally Close
Permanent range: 00.00 ÷ 20.00/000.0 ÷ 200.0 / 0 ÷ 2000ΔµS / 20.00 ΔmS
Permanent time: 00:00 ÷ 99:99 hh:mm minimum step 15 min.
No. 1 for Washing ON-OFF Relays - Maximum load 1A at 230Vac
Rinsing Time intervals to be set: 00.00 ÷ 24.00 hh.mm. Minimum step 15 min.

DIGITAL INPUT
Input supply: 24 Vdc /ac
Absorption: 10mA max

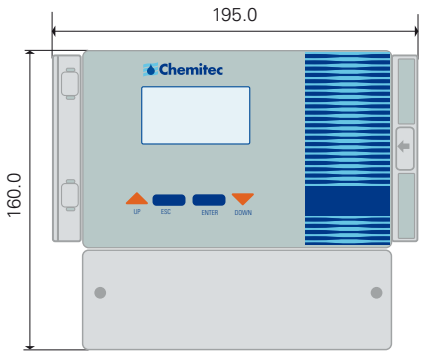
SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

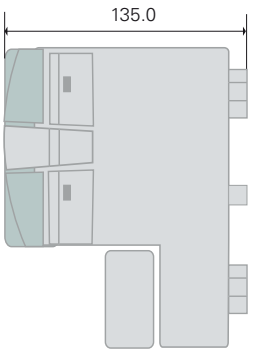
ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY /
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 6W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

MOD. µACP 4022 P

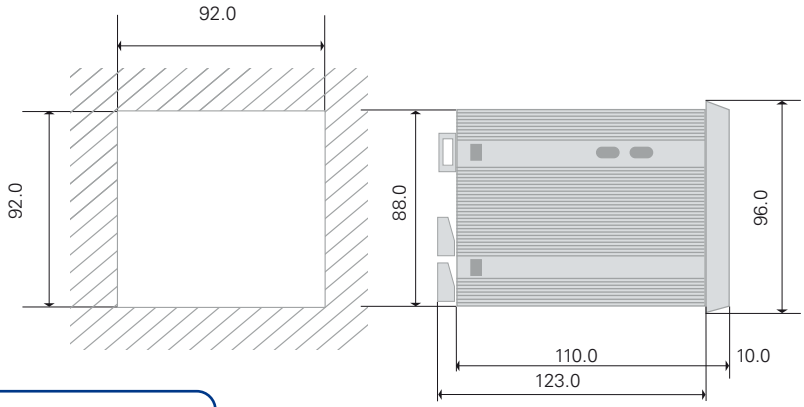
WALL MOUNTING VERSION
Mechanical Protection: Closed IP65 EN60529 – with frontal panel open IP54
Dimension: (L x H x D) 195x160x140mm
Weight: 1.0 Kg
Material: Grey ABS frontal panel Polycarbonate UV resistant





MOD. µACP 4022

PANEL MOUNTING VERSION
Mechanical Protection: frontal panel IP54
Rear panel IP30
Dimension: (L x H x D) 96x96x123mm
(135mm. mounting depth)
Weight: .0.7 Kg
Material: Black Grey ABS frontal panel Polycarbonate UV resistant



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Chemitec
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µACP 4037
pH or Redox and temperature Analyser - controller

pH or Redox measurement
Available to be set via keyboard

Temperature measurement
and automatic compensation with NTC sensor.

Graphic LCD back lighted Display
Simultaneous visualization of: conductivity and temperature measurement, analogue and digital output status. 4 digit keyboard for programming.

Internal Data Logger
4 Mbit flash memory (16.000 records). Tabular or graphic data display with maximum, minimum and average values.

PID regulation
to be set for analogue or digital output (PWM or Frequency)

n.2 Analogue outputs
freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

n.2 digital output for threshold
Rising or falling excitation with hysteresis and timing regulation

n.1 digital output for alarm
to be set for: minimum/maximum value, delayed alarm, malfunctioning, live check

n.1 digital output for automatic cell washing
Rinsing time intervals to be set via keyboard

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Manual activation of the whole outputs, analogue and digital, for simulation.

Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP
Set point, Alarm, washing cycle, , PID parameter regulation, , temperature compensation, Password, Serial protocol communication, language

CALIBRATION
Automatic with Auto-Buffer Recognition. Evaluation of the electrode status

ANALOGUE OUTPUT
Freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

ARCHIVE
Internal data logging of measuring data. To be set time interval recording and storing type

GRAPHIC MEASURE
Graphic display of measurement records. Time base to be set

MANUAL CONTROL
Outputs manual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4037
pH or Redox and temperature Analyser - controller

MEASURING RANGES
pH: 00.00 ÷ 14.00 Resolution: 0.01 pH Accuracy: 0.2% f.s.
Redox: ± 1500 mV Resolution: ± 1 mV Accuracy: ± 1mV
Temperature: -10 ÷ 130°C Resolution: 0.1°C Accuracy: 1% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: pH/Redox and temperature measurement, digital output status. Analogues output values. Recording status and malfunctioning
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: pH / Rx
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Temperature / Measurement repetition / PID
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower
Dosing function (P – PI – PID)
Proportional range: 0 ÷ 500%
Integral time: 0:00 ÷ 5:00 min
Derivative time: 0:00 ÷ 5:00 min

DIGITAL OUTPUTS
No. 2 for Threshold ON-OFF Relays - Maximum load 1A at 230Vac
Set Point ON – OFF: 00.00 ÷ 14.00 pH / ± 1500 mV
To be set hysteresis and timing regulation: 000 ÷ 999 seconds
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Set Point delay, Malfunctionning, Min / Max, Dead time (live check)
Delay time : 00:00 ÷ 59:99 mm:ss minimum step 15 seconds
De-activation Set Point: activate/deactivate in reference with the alarm excitation
Relay position: Normally Open / Normally Close
Permanent range: 00.00 ÷ 14.00 Δ pH/ ± 1500 Δ mV
Permanent time: 00:00 ÷ 99:99 hh:mm minimum step 15 min.
No. 1 for Washing ON-OFF Relays - Maximum load 1A at 230Vac
Rinsing Time intervals to be set: 00.00 ÷ 24.00 hh.mm. Minimum step 15 min.

DIGITAL INPUT
Input supply: 24 Vdc /ac
Absorption: 10mA max

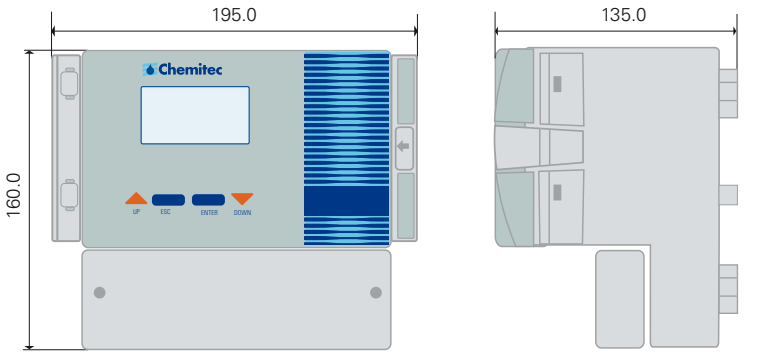
SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY /
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 6W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

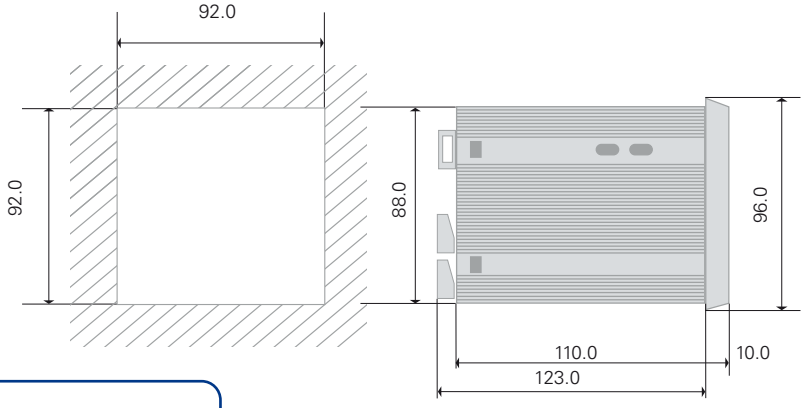
MOD. µACP 4037P

WALL MOUNTING VERSION
Mechanical Protection: Closed IP65 EN60529 – with frontal panel open IP54
Dimension: (L x H x D) 195x160x135mm
Weight: 1.0 Kg
Material: Grey ABS – frontal panel Polycarbonate UV resistant



MOD. µACP 40372

PANEL MOUNTING VERSION
Mechanical Protection: frontal panel IP54 – Rear panel IP30
Dimension: (L x H x D) 96x96x123mm (135mm. mounting depth)
Weight: .0.7 Kg
Material: Black Grey ABS – frontal panel Polycarbonate UV resistant



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Chemitec
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µACP 4061
Nephelometric Turbidity measurement

Nephelometric Turbidity measurement
Scattering 90° optical system,
with double sensor to compensate
the optical signal drift .
Measuring ranges available
to be set via keyboard

Graphic LCD back lighted Display
Simultaneous visualization of:
Turbidity measurement,
analogue and digital output status.
4 digit keyboard for programming.

Internal Data Logger
4 Mbit flash memory (16.000 records).
Tabular or graphic data display with
maximum, minimum and average values.

PID regulation
to be set for analogue or
digital output (PWM or Frequency)

no.2 Analogue outputs.
freely programmable within the measuring range.
Second output to be set for:
auxiliary/PID regulation

no. 2 digital output for threshold
Rising or falling excitation with hysteresis and
timing regulation

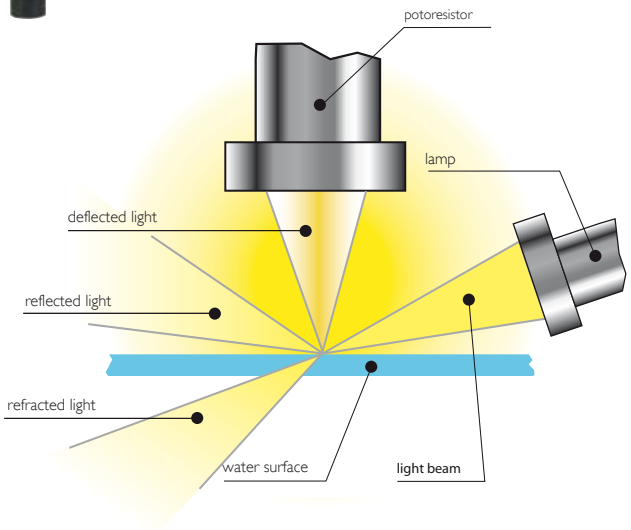
n.1 digital output for alarm
to be set for: minimum/maximum value, delayed alarm, malfunctioning, live check

n.1 digital output for automatic cell washing
Rinsing time intervals to be set via keyboard

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Manual activation of the whole outputs, analogue and digital, for simulation.



Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP
Set point, Alarm, washing cycle, , PID parameter regulation, , temperature compensation, Password, Serial protocol communication, language

CALIBRATION
Automatic by using PVC plate with known reflectance (equipped with the unit)

ANALOGUE OUTPUT
reely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

ARCHIVE
Internal data logging of measuring data. To be set time interval recording and storing type

GRAPHIC MEASURE
Graphic display of measurement records. Time base to be set

MANUAL CONTROL
Outputs anual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4061
Nephelometric Turbidity measurement

MEASURING RANGES
Turbidity : 000.0 ÷ 100.0 / 0000 ÷ 1000 FTU/NTU
Resolution: ± 0.1 / ± 1 FTU/NTU Accuracy: 2.5% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: turbidity measurement, digital output status.
Analogues output values. Recording status and malfunctioning
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: Turbidity
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Temperature / Measurement repetition / PID
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower
Dosing function (P – PI – PID)
Proportional range: 0 ÷ 500%
Integral time: 0:00 ÷ 5:00 min Derivative time: 0:00 ÷ 5:00 min

DIGITAL OUTPUTS
No. 2 for Threshold ON-OFF Relays - Maximum load 1A at 230Vac
Set Point ON – OFF: 000.0 ÷ 100.0 / 0000 ÷ 1000 FTU/NTU
To be set hysteresis and timing regulation: 000 ÷ 999 seconds
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Set Point delay, Malfunctionning, Min / Max, Dead time (live check)
Delay time : 00:00 ÷ 59:99 mm:ss minimum step 15 seconds
De-activation Set Point: activate/deactivate in reference with the alarm excitation
Relay position: Normally Open / Normally Close
Permanent range: 000.0 ÷ 100.0 / 0000 ÷ 1000 ΔFTU/NTU
Permanent time: 00:00 ÷ 99:99 hh:mm minimum step 15 min.
No. 1 for Washing ON-OFF Relays - Maximum load 1A at 230Vac
Rinsing Time intervals to be set: 00.00 ÷ 24.00 hh.mm. Minimum step 15 min.

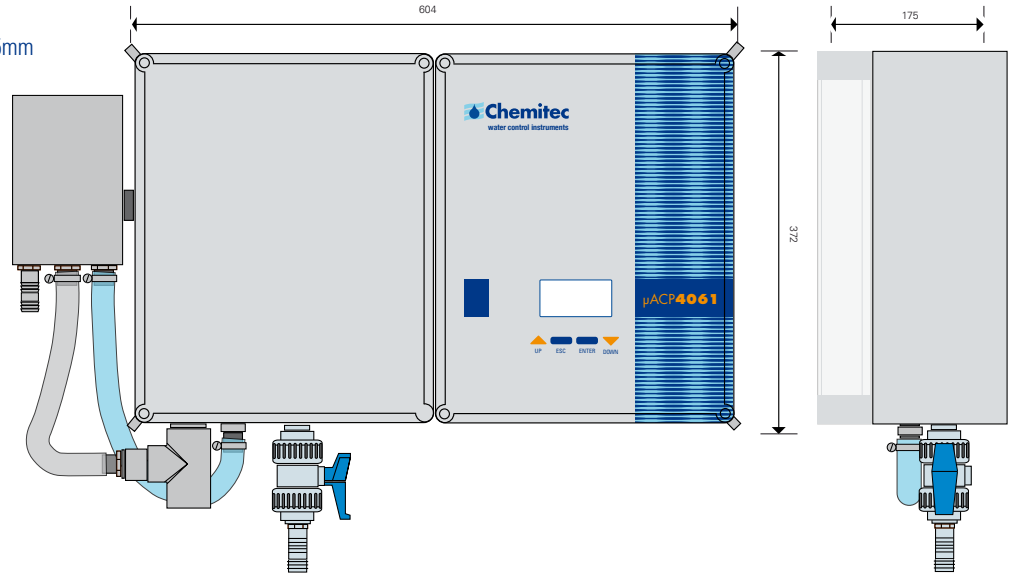
DIGITAL INPUT
Input supply: 24 Vdc /ac
Absorption: 10mA max

SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY /
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 6W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

MOD. µACP 4061
WALL MOUNTING VERSION
Mechanical Protection: Closed IP55
Dimension: (L x H x D) 604x372x175mm
Weight: 10.5 Kg
Material: Grey ABS ñ frontal panel Polycarbonate UV resistant



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water control instruments

Via Isaac Newton 28
50018 Scandicci - Firenze (Italy)
tel. +39 55 756645 fax + 39 55 756697
web site: www.chemitec.it
e-mail:info@chemitec.it

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µACP 4062
Turbidity Analyser - controller

Turbidity measurement
Measuring ranges available to be set via keyboard

Graphic LCD back lighted Display
Simultaneous visualization of: Turbidity measurement, analogue and digital output status. 4 digit keyboard for programming.

Internal Data Logger
4 Mbit flash memory (16.000 records). Tabular or graphic data display with maximum, minimum and average values.

PID regulation
to be set for analogue or digital output (PWM or Frequency)

n.2 Analogue outputs
freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

n.2 digital output for threshold
Rising or falling excitation with hysteresis and timing regulation

n.1 digital output for alarm
to be set for: minimum/maximum value, delayed alarm, malfunctioning, live check

n.1 digital output for automatic cell washing
Rinsing time intervals to be set via keyboard

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Manual activation of the whole outputs, analogue and digital, for simulation.

Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP

Set point, Alarm, washing cycle, , PID parameter regulation, , temperature compensation, Password, Serial protocol communication, language

CALIBRATION

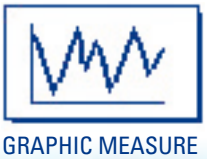
Automatic on two different values

ANALOGUE OUTPUT

Freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

ARCHIVE

Internal data logging of measuring data. To be set time interval recording and storing type



GRAPHIC MEASURE

Graphic display of measurement records. Time base to be set

MANUAL CONTROL

Outputs manual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4062
Turbidity Analyser - controller

MEASURING RANGES
Turbidity : 0.00 ÷ 1.00 / 00.0 ÷ 10.0 / 0 ÷ 100 FTU/NTU
Resolution: ± 0.01 / ± 0.1 / ± 1 FTU/NTU Accuracy: 0.5% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: turbidity measurement, digital output status.
Analogues output values. Recording status and malfunctioning
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: Turbidity
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Measurement repetition / PID
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower
Dosing function (P – PI – PID)
Proportional range: 0 ÷ 500%
Integral time: 0:00 ÷ 5:00 min
Derivative time: 0:00 ÷ 5:00 min

DIGITAL OUTPUTS
No. 2 for Threshold ON-OFF Relays - Maximum load 1A at 230Vac
Set Point ON – OFF: 0.00 ÷ 1.00 / 00.0 ÷ 10.0 / 0 ÷ 100 FTU/NTU
To be set hysteresis and timing regulation: 000 ÷ 999 seconds
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Set Point delay, Malfunctionning, Min / Max, Dead time (live check)
Delay time : 00:00 ÷ 59:99 mm:ss minimum step 15 seconds
De-activation Set Point: activate/deactivate in reference with the alarm excitation
Relay position: Normally Open / Normally Close
Permanent range: 0.00 ÷ 1.00 / 00.0 ÷ 10.0 / 0 ÷ 100 FTU/NTU
Permanent time: 00:00 ÷ 99:99 hh:mm minimum step 15 min.
No. 1 for Washing ON-OFF Relays - Maximum load 1A at 230Vac
Rinsing Time intervals to be set: 00.00 ÷ 24.00 hh.mm.
Minimum step 15 min.

DIGITAL INPUT
Input supply: 24 Vdc /ac
Absorption: 10mA max

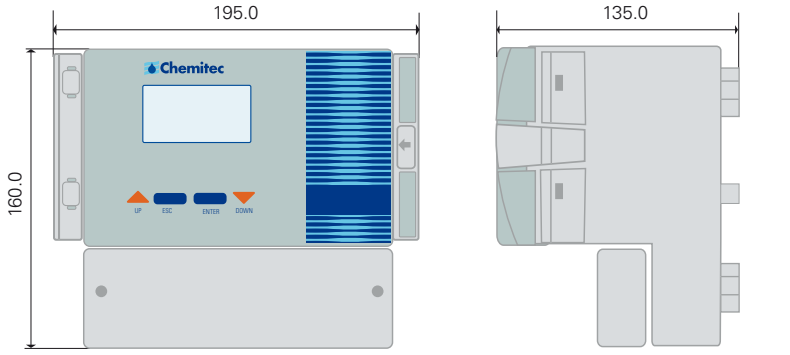
SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY /
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 6W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

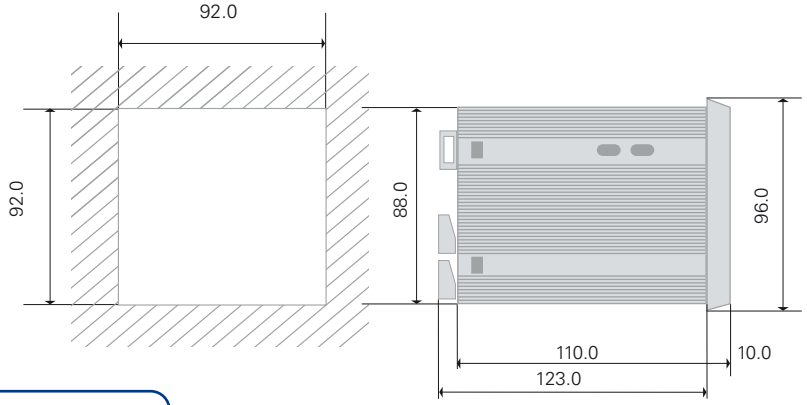
MOD. µACP 4062 P

WALL MOUNTING VERSION
Mechanical Protection: Closed IP65 EN60529 – with frontal panel open IP54
Dimension: (L x H x D) 195x160x135
Weight: 1.0 Kg
Material: Grey ABS ñ frontal panel Polycarbonate UV resistant



MOD. µACP 4062

PANEL MOUNTING VERSION
Mechanical Protection: frontal panel IP54 – Rear panel IP30
Dimension: (L x H x D) 96x96x123mm (135mm. mounting depth)
Weight: .0.7 Kg
Material: Black Grey ABS frontal panel Polycarbonate UV resistant



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Via Isaac Newton 28
50018 Scandicci - Firenze (Italy)
tel. +39 55 756645 fax + 39 55 756697
web site: www.chemitec.it
e-mail:info@chemitec.it

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µACP 4063P
Turbidity and Sludge Concentration analyser

uACP 4063P is used for optical measurement in clear and turbid water and in sludge application .
It can be connect to a large range of sensors to cover a wide range of solid matter concentration .

Main Application: Open sewage treatment plant areas, such as inflow, preclarifier, Oxydation, sludge removal, effluent of wastewater treatment plants
Process monitoring in chemical and paper industry, waste incinerators, steam generation plants, ect.

Graphic LCD back lighted Display

Internal Data Logger 4 Mbit flash memory (16.000 records).

PID regulation

n.2 Analogue outputs

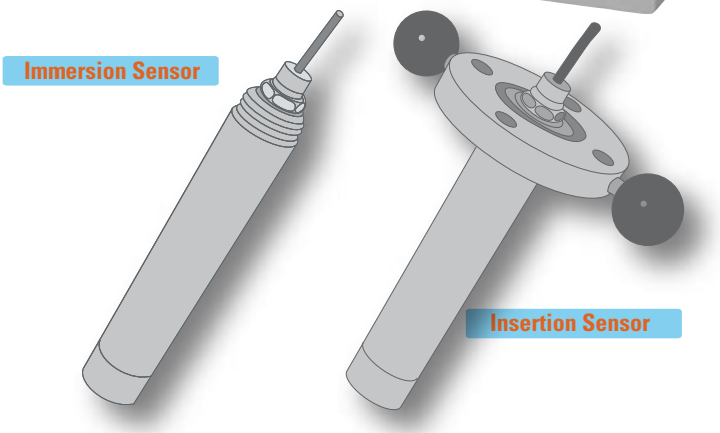
n.2 digital output for threshold

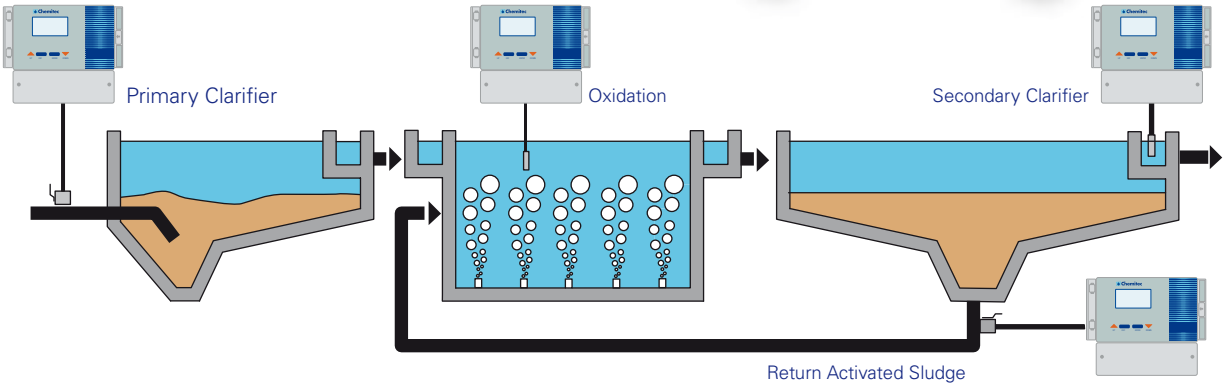
n.1 digital output for alarm

n.1 digital output for automatic sensor washing

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol





Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP
Set point, Alarm, washing cycle, , PID parameter regulation, Password, Serial protocol communication, language

CALIBRATION
Automatic by using pre-set factory calibration curves or manual.

ANALOGUE OUTPUT
reely programmable within the measuring range. Second output to be set for: auxiliary/PID regulation

ARCHIVE
Internal data logging of measuring data. To be set time interval recording and storing type

GRAPHIC MEASURE
Graphic display of measurement records. with maximum, minimum and average values.
Time base to be set

MANUAL CONTROL
Outputs anual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4063P
Turbidity and Sludge Concentration analyser.

MEASURING RANGES
Measurement range (0÷9999) and unit (FTU / NTU / ppm /gr/lt)freely selectable – in reference with the connected sensor.
Accuracy: 0.5% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: turbidity measurement, digital output status. Analogues output values.
Recording status and malfunctioning
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: Turbidity
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Measurement repetition / PID
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower
Dosing function (P – PI – PID)
Proportional range: 0 ÷ 500%
Integral time: 0:00 ÷ 5:00 min Derivative time: 0:00 ÷ 5:00 min

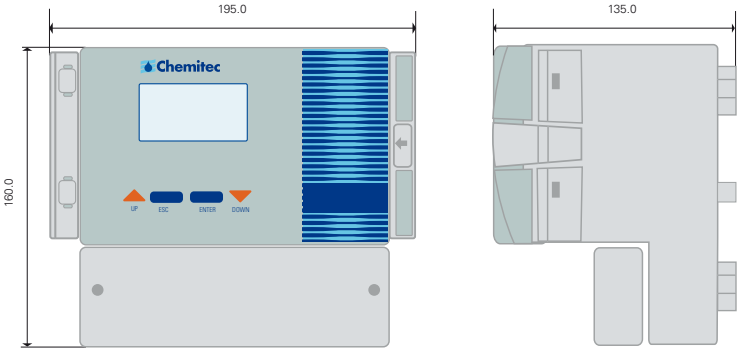
DIGITAL OUTPUTS
No. 2 for Threshold ON-OFF Relays - Maximum load 1A at 230Vac
Set Point ON – OFF To be set hysteresis and timing regulation: 000 ÷ 999 seconds
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Set Point delay, Malfunctionning, Min / Max, Dead time (live check)
Delay time : 00:00 ÷ 59:99 mm:ss
minimum step 15 seconds
De-activation Set Point: activate/deactivate in reference with the alarm excitation
Relay position: Normally Open / Normally Close
No. 1 for Washing ON-OFF Relays - Maximum load 1A at 230Vac
Rinsing Time intervals and period to be set
Minimum step 15 min.

DIGITAL INPUT
Input supply: 24 Vdc /ac
Absorption: 10mA max

SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY /
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 6W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

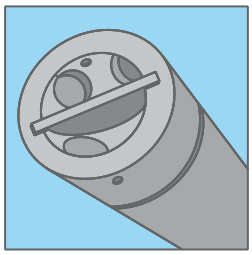


MOD. µACP 4063P

WALL MOUNTING VERSION
Mechanical Protection: Closed IP65 EN60529 – with frontal panel open IP54
Dimension: (L x H x D) 195x160x135
Weight: 1.0 Kg
Material: Grey ABS ñ frontal panel Polycarbonate UV resistant

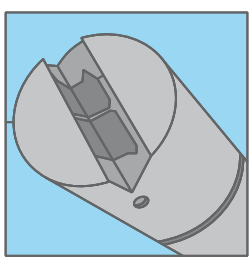
Turbidity/Sludge Concentration Sensor suitable for ACP 4063

7530 SSN Turbidity



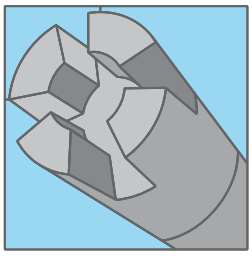
Measuring principle 90° scattered light in accordance with ISO 7027 / EN 27027. Infrared light at 880 nm Reference Using four-beam pulsed light method
Measuring range 2,0 ... 1000 FTU/FNU
Accuracy < 1% of meas.range end value
Factory calibration Formazine standard
Operating temp. 0 ÷ +50 °C
Pressure max. 6bar Protection IP 68
Material: Sensor body Stainless steel SS 316 Ti, POM, Araldit® glue, O-rings Viton®
Dimensions mm (LxØ):Immersion type 137x38
Insertion type 220 × 38

7520SAV High concentration



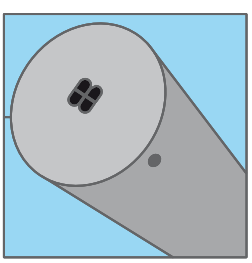
Measuring principle Light absorption method. Infrared light at 880nm Reference using four-beam pulsed light method
Measuring range 0 ... 50gr/lt SS, dependent on sludge type
Accuracy < 1% of meas.range end value
Factory calibration with SiO2
Operating temp. 0 ÷ +50 °C
Material: Sensor body SS 316 Ti,
Sight glass Epoxy resin, O-rings Viton
Dimensions mm (LxØ):Immersion type 139x38
Insertion type 220 × 38

7510SAM Medium concentration



Measuring principle Light absorption method. Infrared light at 880nm Reference using four-beam pulsed light method
Measuring range 0 ... 12gr/lt SS, dependent on sludge type
Accuracy < 1% of meas.range end value
Factory calibration with SiO2
Operating temp. 0 ÷ +50 °C
Material: Sensor body SS 316 Ti,
Sensor window Epoxy, O-rings Viton
Dimensions mm (LxØ):Immersion type 137x38 Insertion type 220 × 38

7540SRH Very High concentration



Measuring principle Light absorption method. Infrared light at 880nm Reference using four-beam pulsed light method
Measuring range 10 ... 150gr/lt SS, dependent on sludge type
Accuracy < 1% of meas.range end value
Factory calibration with SiO2
Operating temp. 0 ÷ +50 °C
Material: Sensor body SS 316 Ti,
Sight glass Epoxy resin, O-rings Viton
Dimensions mm (LxØ):Immersion type 134x38 Insertion type 220 × 38

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50018 Scandicci - Firenze (Italy)
tel. +39 055 756645 fax + 39 055 756697
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µACP 4082
Dissolved Oxygen and temperature Analyser - controller

Dissolved oxygen measurement
ppm, mg/l or saturation percentage. Available to be set via keyboard

Temperature measurement
and automatic compensation with NTC sensor.

Graphic LCD back lighted Display
Simultaneous visualization of: dissolved oxygen and temperature measurement, analogue and digital output status. 4 digit keyboard for programming.

Internal Data Logger
4 Mbit flash memory (16.000 records). Tabular or graphic data display with maximum, minimum and average values.

PID regulation
to be set for analogue or digital output (PWM or Frequency)

n.2 Analogue outputs.
freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

n.2 digital output for threshold
Rising or falling excitation with hysteresis and timing regulation

n.1 digital output for alarm
to be set for: minimum/maximum value, delayed alarm, malfunctioning, live check

n.1 digital output for automatic probe washing
Rinsing time intervals to be set via keyboard

n.1 digital input to stop dosing system

RS485 Serial output MODBUS RTU protocol
For remote set-up, real time data acquisition or download

Manual activation of the whole outputs, analogue and digital, for simulation.

Simple and quick set up driven by a conversational software. All the functions included in the following menu

SET UP
Set point, Alarm, washing cycle, , PID parameter regulation, , temperature compensation, Password, Serial protocol communication, language

CALIBRATION
Automatic or manual with automatic salinity compensation

ANALOGUE OUTPUT
Freely programmable within the measuring range. Second output to be set for: temperature/auxiliary/PID regulation

ARCHIVE
Internal data logging of measuring data. To be set time interval recording and storing type

GRAPHIC MEASURE
Graphic display of measurement records. Time base to be set

MANUAL CONTROL
Outputs manual command for: simulation, electrical connection and working check of dosing system or remote control system

µACP 4082

Dissolved Oxygen and temperature Analyser - controller

MEASURING RANGES
Dissolved Oxygen: 00.0 ÷ 20.0 ppm - mg/l
Saturation percentage: 000 ÷ 200%
Resolution: 0.1ppm/1% Accuracy: 0.5% f.s.
Temperature: -10 ÷ 130°C Resolution: 0.1°C Accuracy: 1% f.s.

DISPLAY /PROGRAMMATION
Graphic DISPLAY LCD STN 128x64 back lighted
Simultaneous display of: dissolved oxygen and temperature measurement, digital output status. Analogues output values. Recording status and malfunctioning
Keyboard (4 digit) for programming

MEASUREMENT RECORDING
Data logger Flash 4 Mbit (16.000 records)
Recording steps: 00:00 ÷ 99:99 min
Type: f.i.f.o. or filling
Data display: tabular or graphic

ANALOGUE OUTPUTS
First
Measurement: Dissolved Oxygen
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Limit programmation: upper/lower
Maximun load: 500 Ohm
NAMUR output alarm 2.4 mA (type 4…20mA)
Second
To be set for: Temperature / Measurement repetition / PID
Type: 0.00 / 4.00 ÷ 20.00 mA galvanically separated
Maximum load: 500 Ohm
Limit programmation: upper/lower
Dosing function (P – PI – PID)
Proportional range: 0 ÷ 500%
Integral time: 0:00 ÷ 5:00 min
Derivative time: 0:00 ÷ 5:00 min

DIGITAL OUTPUTS
No. 2 for Threshold ON-OFF Relays - Maximum load 1A at 230Vac
Set Point ON – OFF: 00.0 ÷ 20.0 ppm / 000 ÷ 200% Saturation
To be set hysteresis and timing regulation: 000 ÷ 999 seconds
No. 1 for Alarm ON-OFF Relays - Maximum load 1A at 230Vac
To be set for: Set Point delay, Malfunctionning, Min / Max,
Dead time (live check)
Delay time : 00:00 ÷ 59:99 mm:ss minimum step 15 seconds
De-activation Set Point: activate/deactivate in reference
with the alarm excitation
Relay position: Normally Open / Normally Close
Permanent range: 00.00 ÷ 20.0 ppm Δ
Permanent time: 00:00 ÷ 99:99 hh:mm minimum step 15 min.
No. 1 for Washing ON-OFF Relays - Maximum load 1A at 230Vac
Rinsing Time intervals to be set: 00.00 ÷ 24.00 hh.mm. Minimum step 15 min.

DIGITAL INPUT
Input supply: 24 Vdc /ac
Absorption: 10mA max

SERIAL OUTPUT
RS485 Galvanically separated 1200 ÷ 38400 Baud Rate
MODBUS RTU Protocol

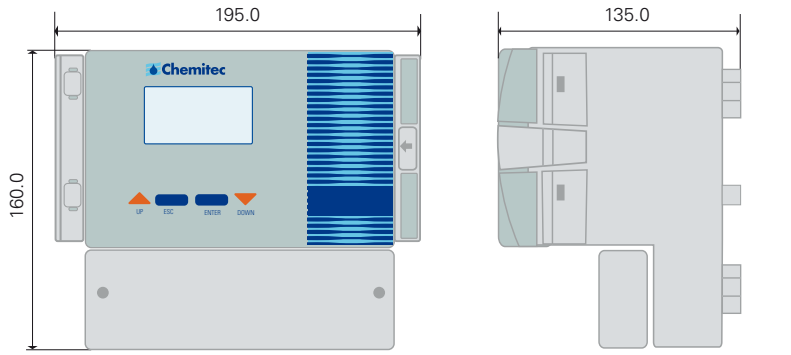
ENVIROMENT CONDITION
Working temperature: 0÷50°C
Storage and transport temperature -25÷65°C
Humidity: 10-95%

ELECTRICAL PROTECTION / SUPPLY /
Power Supply: 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) –
Isolation: 4KV
Absorption: < 6W
Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

Mod. µACP 4082 P

WALL-MOUNTING VERSION
Mechanical Protection: Closed IP65 EN60529 – with frontal panel open IP54
Dimension: (L x H x D) 195x160x130mm
Weight: 1.0 Kg
Material: Grey ABS – frontal panel Polycarbonate UV resistant

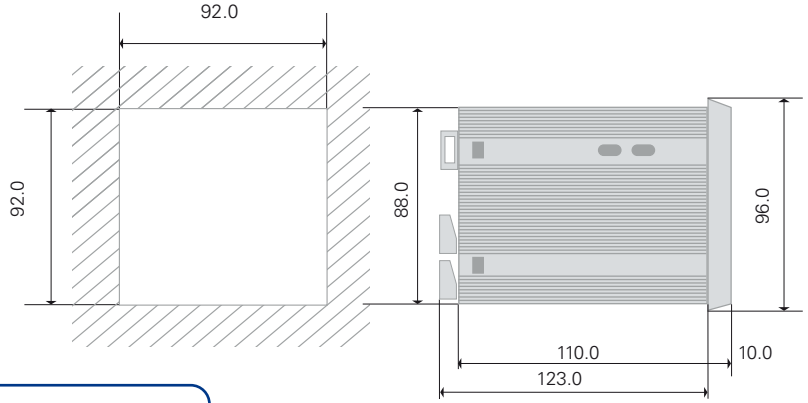
Cod. 9700401010



Mod. µACP 4082

PANEL MOUNTING VERSION
Mechanical protection: Front IP54 Rear IP 30
Dimension: (L x H x D) 96x96x123mm
Mounting depth: 130mm
Weight: 0.7 Kg
Material: Black ABS – frontal panel Polycarbonate UV resistant

Cod. 9700401000



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Via Isaac Newton 28
50018 Scandicci - Firenze (Italy)
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4137 pH - Rx

Misuratore di pH/redox a µProcessore.

Misura di pH o Redox selezionabile dall'operatore da tastiera
pH or Redox measurement Available to be set via keyboard

Misura della Temperatura con Sonda NTC e compensazione Automatica della Temperatura
Temperature measurement and automatic compensation with NTC sensor.

Display LCD Numerico di visualizzazione. Tastiera di programmazione a 4 tasti.
LCD numeric display. 4 digit keyboard for programming.

Calibrazione da tastiera con riconoscimento automatico dei tamponi
Automatic calibration with Auto-Buffer Recognition.

Uscita Analogica separata galvanicamente con limiti programmabili all'interno del range di misura.
Analogue output. galvanically separated, freely programmable within the measuring range.

n. 2 Uscite Relè per Set point , con programmazione del campo di lavoro e del ritardo di attivazione
no. 2 digital outputs for threshold. Rising or falling excitation with hysteresis and delayed activation time

4122 µS

Misuratore di Conducibilità a µProcessore.

Misura di conducibilità con campi di misura selezionabili dall'operatore da tastiera
Conductivity measurement Measuring ranges available to be set via keyboard

Misura della Temperatura con Sonda NTC e compensazione Automatica della Temperatura
Temperature measurement and automatic compensation with NTC sensor.

Display LCD Numerico di visualizzazione. Tastiera di programmazione a 4 tasti.
LCD numeric display. 4 digit keyboard for programming.

Calibrazione da tastiera su due punti
Calibration Automatic on two different values

Uscita Analogica separata galvanicamente con limiti programmabili all'interno del range di misura.
Analogue output galvanically separated, freely programmable within the measuring range.

n. 2 Uscite Relè per Set point , con programmazione del campo di lavoro e del ritardo di attivazione
no. 2 digital output for threshold. Rising or falling excitation with hysteresis and delayed activation time

4122 µS

4137 pH - Rx

Caratteristiche tecniche

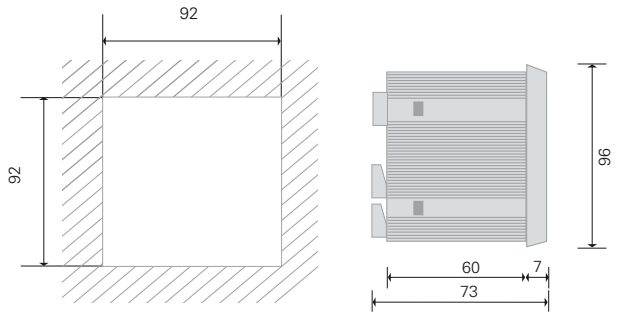
	4122 Conducimetro	4137 pH/ Redox- metro
Campi di Misura	00.00 ÷ 20.00/000.0 ÷ 200.0/0 ÷ 2000µS/00.00 ÷ 20.00 mS	00.00 ÷ 14,00pH / ± 1500mV
Risoluzione	0.01/ 0.1/ 1µS/0.01 mS	± 0.01pH / ± 1mV
Precisione	± 1% F.S.	± 0.5% F.S.
Impedenza d'ingresso		> 10 G Ohm
Misura della Temperatura	SI	SI
Compensazione Temperatura	Automatica	Automatica
DISPLAY	LCD numerico 4 cifre	LCD numerico 4 cifre
Controlli	4 Tasti a Bolla	4 Tasti a Bolla
Calibrazione	Automatica da tastiera	Automatica da tastiera
Uscita analogica	0/4÷20 mA Separata Galvanicamente carico max. 500 ohm	0/4÷20 mA Separata Galvanicamente carico max. 500 ohm
Uscite digitali	Nr.2 Relè in scambio ON/OFF carico max. 2 A a 230V	Nr.2 Relè in scambio ON/OFF carico max. 2 A a 230V
Temperatura ambiente	0 ÷ 60°	0 ÷ 60°C
Umidità	0÷95% (non condensante)	0÷95% (non condensante)
Alimentazione / Assorbimento	230Vac/dc 50Hz – (Optional 110/24Vac) / < 6 W	230Vac/dc 50Hz – (Optional 110/24Vac) / < 6W
Dimensioni / Peso	96x96x60mm / 0.7 Kg	96x96x60mm / / 0.7 Kg
Montaggio / Protezione	Quadro / IP45	Quadro/ IP45

Technical Features

	4122 Conductivity	4137 pH/ Redox
Measuring ranges	00.00 ÷ 20.00/000.0 ÷ 200.0/0 ÷ 2000µS/00.00 ÷ 20.00 mS	00.00 ÷ 14,00pH / ± 1500mV
Resolution	0.01/ 0.1/ 1µS/0.01 mS	± 0.01pH / ± 1mV
Accuracy	± 1% F.S.	± 0.5% F.S.
Input Impedance		> 10 G Ohm
Temperature Measurement	Yes	Yes
Temperature Compensation	Automatic	Automatic
DISPLAY	LCD numeric 4 digit	LCD numeric 4 digit
Programming Keyboard	4 bubble keys	4 bubble keys
Calibration	Automatic via Key board	Automatic via Key board
Analogue Output	0/4÷20mA galvanically separated - Max load 500 Ohm	0/4÷20mA galvanically separated - Max load 500 Ohm
Digital Outputs	Nr.2 for threshold ON/OFF Max load 2 A at 230V	Nr.2 for threshold ON/OFF Max load 2 A at 230V
Environment Temperature	0 ÷ 60°C	0 ÷ 60°C
Humidity	0 ÷ 95% (non condensing)	0 ÷ 95% (non condensing)
Supply Voltage / Absorption	230Vac/dc 50Hz – (Optional 110/24Vac) / < 6W	230Vac/dc 50Hz – (Optional 110/24Vac) / < 6W
Dimension / Weigth	96x96x60mm / 0.7 Kg	96x96x60mm / 0.7 Kg
Mounting / Protection	Panel / IP45	Panel / IP45

PANEL MOUNTING VERSION
Mechanical Protection: frontal panel IP54
Rear panel IP30
Dimension: (L x H x D) 96x96x60mm
Mounting depth 75mm
Weight: .0.7 Kg
Material: Black Grey ABS frontal panel
Polycarbonate UV resistant

VERSIONE PER MONTAGGIO A QUADRO
Protezione meccanica: IP54 - Posteriore IP30
Dimensioni (L x H x P): 96x96x60mm
Profondità di montaggio: 75mm
Peso: 0.7 Kg
Materiale: ABS nero;
pannello frontale policarbonato resistente UV



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water
control
instruments

Via Isaac Newton 28
50018 Scandicci - Firenze (Italy)
tel. +39 55 756645 fax + 39 55 756697
web site: www.chemitec.it
e-mail:info@chemitec.it

Chemitec
water control instruments

4137 pH/Rx
4122 µS

41xx – Analyser-controller for pH, Redox and Conductivity

- pH or Redox measurement available to be set via keyboard
- Conductivity measurement with 4 different ranges available to be set via keyboard
- Temperature measurement and automatic compensation with NTC, PT100 and PT1000 sensors.

panel version

wall mounting version

- Analogue output, galvanically separated, freely programmable within the measuring range.
- no. 2 digital outputs for threshold. Hysteresis and delayed activation time programmable

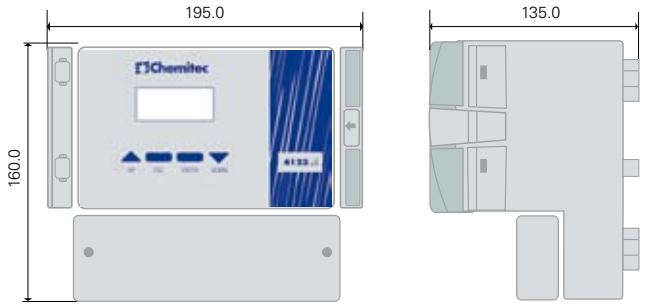
Measuring Features	4122 Conductivity	4137 pH/ Redox
Measuring ranges	00.00 ÷ 20.00 / 200.0 / 2000 µS 00.00 ÷ 20.00 mS	00.00 ÷ 14,00pH / ± 1500mV
Resolution	0.01µS / 0.1µS / 1µS / 0.01mS	0.01pH / 1mV
Accuracy	1% F.S.	0.5% F.S.

Common Technical Features

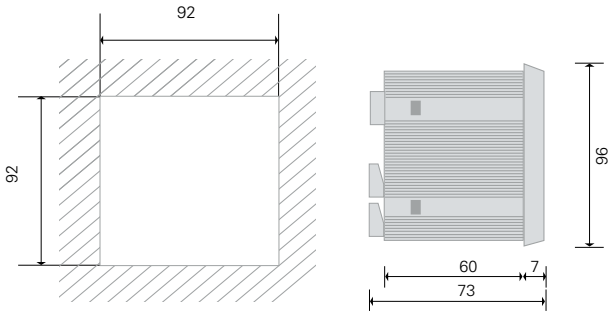
Visualization	LCD numeric Display 4 digit
Programming Keyboard	4 bubble keys
Temperature Compensation	Automatic
Calibration	Two points - Automatic via Key board
Analogue Output	0/4÷20mA galvanically separated - Max load 500 Ohm
Digital Outputs	Nr.2 for threshold ON/OFF Max load 2 A at 230V
Environment Temperature	0 ÷ 60°C with 0 ÷ 95% Humidity (non condensing)
Supply Voltage	230Vac/dc 50Hz – (Optional 110/24Vac)
Absorption	< 6W

4137 pH/Rx
4122 µS

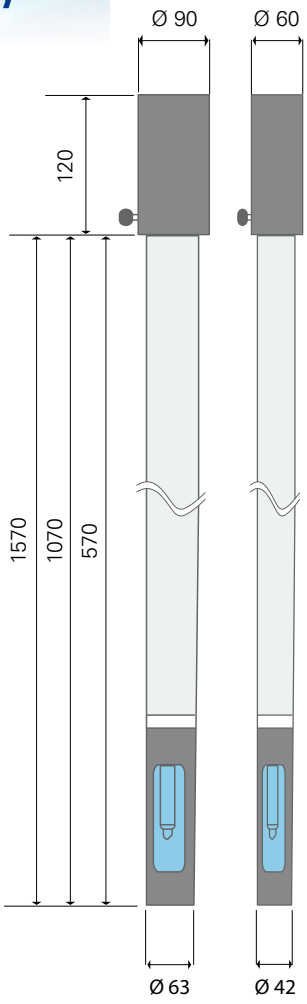
41xx – Analyser-controller for pH, Redox and Conductivity



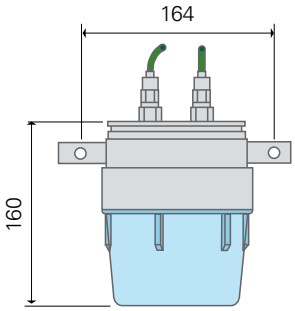
Mod. 4122P/4137P WALL MOUNTING VERSION
Mechanical Protection: Closed IP65 EN60529 –
with frontal panel open IP54
Dimension: (L x H x D) 195x160x135mm
Weight: 1.0 Kg
Material: Grey ABS



Mod. 4122/4137 PANEL MOUNTING VERSION
Mechanical Protection: frontal panel IP54
Rear panel IP30
Dimension: (L x H x D) 96x96x60mm
Mounting depth 85mm
Weight: .0.7 Kg
Material: Black ABS

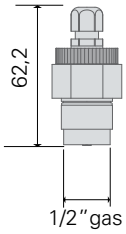


S315
Immersion probe holder
Complete with protection terminal flange
Material: Polypropylene body,
Nylon fixing screw, NBR O-ring
Max working temperature: 80 °C
External diameter: Ø 42 and 63 mm
Available length: 500/1000/1500 mm

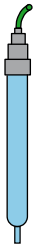


S305W/2 Down flow probe holder For 2 electrodes
Complete with bracket for wall mounting
Material: PVC Body and SAN transparent Becker.
Max working temperature: 50 °C Max working pressure: 4 bar.
Dim. mm. (Ø x h) 130 x 160 Hydraulic connection 3/8" GF

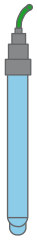
S411S Conductivity cell
K=1 Constant
PVC body 1" threaded with
stainless steel electrodes.
Measuring range 0÷10.000 µS
Max working temperature 50 °C
Max working pressure 1 bar.
Without cable



S406P Redox Electrode
Plastic body, reference electrolyte:
polymer. Diaphragm type:
Single pore
Measuring range ± 1000mV
Working temperature 0÷60°C
Max working pressure 6 bar
Min. sample conductivity 50µS
5 mt. cable included
Dim. mm. (Ø x l) 12 x 120



S401P pH Electrode
Plastic body, reference electrolyte:
polymer. Diaphragm type:
Single pore
Measuring range 2.0÷14.0 pH
Working temperature 0÷60°C
Max working pressure 6 bar
Min. sample conductivity 50µS
5 mt. cable included
Dim. mm. (Ø x l) 12 x 120



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CHEMITEC

SK1040
GSM ALARM

Ricevere informazioni e trasmettere comandi
direttamente dal proprio telefono cellulare

Trasmissione di allarmi e di informazioni tramite messaggi SMS
Alarm and information transmission by SMS

Data logger interno per memorizzazione dati
Internal data logger to store data

Display LCD per verifica immediata dello stato di funzionamento
LCD Display to check immediately the working conditions

Semplice configurazione tramite SW dedicato di corredo
Simple configuration through dedicated SW in the kit

Disponibile in versione da retroquadro o per montaggio a parete
Available for back of board and wall fitting version

SK 1040 GSM ALARM

Accessori per ottimizzare il processo
Accessories for process optimization

Montaggio su barra

Caratteristiche tecniche / *Technical features*

Alimentazione	24Vac/dc
Ingressi digitali	n°8 24Vac/dc fotoaccoppiati
Ingressi analogici	n°4 0/4 - 20mA
Ingresso totalizzatore	n°1 24Vdc
Porta Seriale RS232	n°1 Per configurazione periferica
Ingresso batteria	n°1 Di Backup e invio SMS per mancanza alimentazione
Uscite digitali	n°4 Relè ON/OFF carico resistivo max 1A 230Vac
Modem GSM interno (carta SIM non inclusa)	n°1 Dual band 900-1800Mhz - potenza RF di picco 2W (+33dBm) su 50 Ohm - Sim compatibile con fase 2 GSM11.14. SIM 3/5 volts
Data logger	512 K di memoria (12.000 registrazioni) Intervallo minimo di registrazione: 1 min.
Visualizzatore	Display LCD Alfanumerico 2 righe per 16 caratteri retroilluminato 157x86x60 Montaggio su Barra Din
Dimensioni	250x300x140 Montaggio a parete IP65 Trasformatore 230Vac / 24Vac barra DIN
Optional	Batteria al piombo 12V 1.2A
Power supply	*24Vac/dc*
Digital inputs	*n°8 24Vac/dc photocoupled*
Analogue inputs	*n°4 0/4 - 20mA*
Totalizator input	*n°1 24Vdc*
Serial port RS232	*n°1 for peripheral configuration*
Battery input	*n°1 Backup and SMS sending for lack of feeding*
Digital outputs	*n°4 ON/OFF Relay max resistive load 1A 230Vac*
Internal GSM Modem (*SIM card not included*)	*n°1 Dual band 900-1800Mhz RF peak power 2W (+33dBm) on 50 Ohm Compatible Sim with phase 2 GSM11.14 . SIM 3/5 volts*
Data logger	*512 K of storage (12.000 recordings) - Minimum recording interval 1 min.*
Display	*LCD alphanumeric 2lines for 16 character backlighted display*
Sizes	*157x86x60 Fitting on Din Bar - 250x300x140 Wall fitting IP65*
Optional	*Trasformer 230Vac / 24Vac DIN bar - Plumb battery 12V 1.2A*

SK 1040 Gsm Alarm sfruttando la tecnologia GSM ed i messaggi SMS, permette di:

- Monitorare fino a 4 ingressi analogici (4-20mA o 0-20mA), con programmazione di due soglie per canale ed invio di un SMS di allarme al loro superamento.
- Monitorare fino ad 8 ingressi digitali, definendo la condizione di allarme (NA o NC) con invio di un SMS di allarme al loro cambio di stato.

Ad ogni segnale può essere associata una descrizione per facilitare l'identificazione durante la lettura dei report SMS.
E' possibile programmare un tempo di ritardo all'invio della notifica affinché la condizione di allarme sia stabilizzata.

- Uno degli ingressi digitali è configurabile in modo indipendente come allarme di mancanza rete del quadro elettrico. (necessaria batteria tampone)
- Modificare da remoto lo stato di attivazione dei 4 relé tramite messaggio SMS inviato dal telefono cellulare dell'operatore. Il comando dovrà essere accompagnato da un'apposita password.
- Richiedere l'invio di messaggi di Report sullo stato corrente degli ingressi e dei relé della periferica. Anche tali richieste dovranno essere accompagnate da password.
- Impostare fino a tre diversi numeri telefonici per l'invio degli SMS: tutti gli allarmi vengono notificati a ciascuno dei numeri impostati.
- Memorizzare fino a 12.000 registrazioni con creazione di archivi storici di dati che possono essere scaricati direttamente tramite collegamento ad un PC locale - o trasmessi via MODEM ad un centro di controllo remoto.

La configurazione avviene esclusivamente tramite un apposito software (di corredo).
Il Display LCD - 2 righe per 16 caratteri – indica all'operatore lo stato di funzionamento della periferica
La periferica Gsm dovrà essere dotata di una scheda SIM (non inclusa nella fornitura).

Montaggio a parete IP65

SK 1040 Gsm Alarm applying the GSM technology and using SMS allows:

• Monitoring up to 4 analogue inputs (4-20mA or 0-20mA), with programming of two thresholds per channel and sending an alarm SMS as soon as they are overcome.
• Monitoring up to 8 digital inputs, defining the alarm condition (NC or NO) by sending an alarm SMS when the condition changes.

For each signal a description may be associated to help the identification during the SMS report reading. It is possible to programme a delay time when the message is sent so that the alarm condition is stabilised.

• One of the digital inputs may be configured independently as an alarm for power failure in the electrical panel (it is necessary a buffer battery)
• Modifying the remote activation condition of the 4 relays through a SMS sent from the operator's mobile phone. The control shall be followed by an appropriate password.
• Demanding the sending of Report messages on the current condition of peripheral inputs and relays. These demands have to be followed by password, too.
• Setting up to three different telephone numbers to send SMS: all the messages are sent to each of the set numbers.
• Storing up to 12.000 recordings with the creation of historical databases that can be directly downloaded – through the connection to a local PC – or sent by MODEM to a remote control centre.

The configuration is made exclusively by a special software (in the kit). LCD - 2 line per 16 characters Display – it shows the operator the peripheral working condition. Gsm peripheral will have to be equipped with a SIM card (not being included in the supply).

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CHEMITEC s.r.l.
50018 Scandicci FIRENZE - Via Isaac Newton 30
Tel. +39 (0) 55 756645 - Fax +39 (0) 55 756697
www.chemitec.it e-mail: info@chemitec.it

STUDIO CIAPETTI - FIRENZE ED. 2003

CHEMITEC

SISTEMI DI CAMPIONAMENTO

MAXX GmbH

SPII-A 2X10

Campionatore stazionario termostatato autosvuotante

La **Chemitec** s.r.l., oltre a produrre direttamente strumentazione per il controllo di qualità delle acque, da molti anni commercializza in Italia sistemi per il campionamento degli scarichi.
La lunga esperienza maturata dalla **MAXX Gmbh**, in più di 20 anni di progettazione e produzione di campionatori, consente oggi di offrire una vasta gamma di apparecchiature e di soluzioni tecniche per il prelievo automatico di campioni liquidi, nelle più svariate condizioni impiantistiche.
I modelli presentati in questo depliant si riferiscono alla produzione standard ma, grazie all utilizzo di sistemi modulari, su di essi sono facilmente eseguibili modifiche e personalizzazioni che rispondano alle esigenze specifiche di ciascun utilizzatore.
Tutte le apparecchiature, sia per installazione fissa che portatile, sono progettate con lo scopo di renderne semplice l utilizzo e, soprattutto, la gestione e manutenzione.
L**unità elettronica di controllo** - uguale per tutti i modelli della gamma – grazie ad un Software estremamente flessibile consente: l impostazione di sei differenti programmi di campionamento; la scelta della logica di prelievo secondo tempo, portata o evento; l attivazione a distanza tramite comando esterno; la memorizzazione degli eventi di campionamento e malfunzionamento con eventuale emissione di allarmi; la completa programmazione da PC remoto, tramite un software dedicato, anche in collegamento via **modem GSM**.
Una serie di accorgimenti elettromeccanici e di software permettono all operatore in campo di controllare il funzionamento separato di tutti gli organi del sistema ed eventualmente di intervenire semplicemente su ciascuno di essi.

Campionatori stazionari

SP II — Campionatore stazionario termostatato.

Campionatore automatico per prelievo di campioni in pozzetti o tubazioni non in pressione, tramite pompa a vuoto.

Alloggiamento	Nr. 2 comparti separati a doppia parete, in acciaio inox1.4301, ciascuno con portello e serratura. Comparto superiore, contenente la parte elettronica di controllo e l'unità dosatrice, con portello finestrato. Comparto inferiore termostatato, coibentato (40 mm), contenente il sistema di distribuzione ed i flaconi, con portello cieco. Tettuccio superiore apribile per ispezione
Termostatazione	Automatica a + 4°C Indipendente dall'unità di controllo
Unità di controllo:	Microprocessore con 128KB Eprom, 32KB di ram, 16KB di EEprom. 16 I/O digitali, 8 I/O analogici. Clock real-time. Tastiera impermeabile. Display LCD 4 x 20 retroilluminato. Batteria tampone per i dati di programmazione
Programmazione (sotto password)	multi-lingua selezionabile – (italiano, tedesco, inglese, francese,): in relazione al tempo. – intervallo compreso tra 1min e 99h e 59min. in relazione alla portata – tramite misuratore di portata che disponga di un segnale in uscita di tipo analogico (0/4 – 20mA) o digitale. in relazione ad evento – (anche in combinazione con tempo o portata) contatto attivato da comando remoto o set point di misuratori di pH, °C, Conducibilità, Ossigeno ect. Riempimento di ciascuna bottiglia in relazione al tempo o al numero di campioni Ritardo di partenza con data ed ora Nr. 6 differenti programmi di campionamento liberamente impostabili Memorizzazione degli eventi di campionamento e malfunzionamento con data e ora. Possibilità di programmazione ed acquisizione dati da PC remoto – tramite porta seriale RS 232 e Software dedicato (optional)
Interfaccia	Porta seriale: RS 232 per collegamento a Modem, Personal Computer o stampante (RS 485 opt.) Ingresso analogico 0/4-20 mA. Ingresso digitale per evento o misuratore di portata lanciaimpulsi Uscite digitali: nr. 4 per segnalazione di stato e anomalie (opt.)
Unità dosatrice	In vetro Pirex. Dosaggio variabile: 20 350 ml. con controllo di livello di tipo conduttivo (regolazione via SW della sensibilità) Valvola di scarico(brevettata): sistema rotante motorizzato– senza interruzione del tubo di scarico – aperta frontalmente, senza parti bagnate
Gruppo di prelievo	Pompa per vuoto a membrana per spurgo, aspirazione e aerazione. (regolazione via SW della potenza) Velocità media di aspirazione 60cm/sec. (con prevalenza 5mt.) Max prevalenza di aspirazione: 7,5mt. Pressione 1bar. Diam. Int. Tubo di campionamento1/2" Su richiesta: Pompa Peristaltica ad alta precisione. Volume di prelievo regolabile via SW. Sensore di presenza liquido incorporato.
Dimensioni	mm.1.290 x 690 x 700 - Peso Kg. 100 ca
Alimentazione	230V – 50/60Hz. Consumo: 250VA
Temperatura ambiente	-20 ÷ +40°C
Versioni standard disponibili (altre a richiesta)	1 flacone da 25,0 o 50,0 lt. in PE 2 flaconi da 10,0 lt. in PE 4 flaconi da 6,0 lt. in PE 12 flaconi da 2,9 lt. in PE o in Vetro 24 flaconi da 1,0 lt. in PE o in Vetro

SP II A — Campionatore stazionario termostatato autosvuotante.

Campionatore automatico con carattestiche analoghe al **SPII,** ma con svuotamento automatico dei flaconi e lavaggio sincronizzato.

Sistema di svuotamento	Valvole a schiacciamento posizionate nella parte inferiore dei flaconi: ad azionamento automatico o manuale per svuotamento forzato.Dispositivo lavaggio flaconi: Sincronizzato con il cambio flacone e con lo svuotamento automatico dello stesso. Immissione dell'acqua di lavaggio tramite elettrovalvola. (pressione max 2bar)

Campionatori Portatili

TP I — Campionatore Portatile

Campionatore automatico per prelievo di campioni in pozzetti o tubazioni non in pressione, tramite pompa a vuoto. Alimentazione a batterie ricaricabili o diretta da rete. Vano di contenimento flaconi coibentato a refrigerazione passiva o attiva. Disponibile nelle versioni da: 1 flacone da 10,0 lt. in PE - 2 flaconi da 5,0 lt. in PE - 12 flaconi da 1,0 lt. in PE - 24 flaconi da 0,4 lt. in PE.

Alloggiamento: Sezione elettronica di comando e prelievo: mm 400x405x230 - Peso Kg. 13 ca. - Acciaio Inox 1.4301 con maniglia di trasporto e portello lucchettabile
Sezione alloggiamento flaconi di raccolta campione: mm. 370x578x340 - Contenitore Isobox in PE coibentato con schiuma isolante interna sp.30mm.
Termostatazione: Con Isobox passivo: Tramite inserimento di ghiaccio secco nel vano di contenimento flaconi
Con Isobox attivo: automatica a + 4°C (Alimentazione: 220 / 24 / 12 V)
Gruppo di prelievo: Pompa per vuoto a membrana per spurgo, aspirazione e aerazione. (regolazione via SW della potenza) Velocità media di aspirazione 60cm/sec. (con prevalenza 5mt.) - Max prevalenza di aspirazione: 6,0 mt. Pressione 1bar. Diam. Int. Tubo di campionamento 1/2"
Su richiesta: Pompa Peristaltica ad alta precisione. Volume di prelievo regolabile via SW. Sensore di presenza liquido incorporato.
Altre caratteristiche (Unità di controllo, Programmazione, Interfaccia, Unità dosatrice) come SPII.

TP II — Campionatore Portatile

Campionatore automatico per prelievo di campioni in pozzetti o tubazioni non in pressione, tramite pompa a vuoto. Alimentazione a batterie ricaricabili o diretta da rete. Base di alloggiamento dei flaconi con possibilità di inserimento di ghiaccio per refrigerazione dei campioni. Disponibile nella versione da 24 flaconi da 1,0 lt. in PE - optional con 1 flacone da 10,0 lt.

Alloggiamento: in PE costituito da 3 parti: mm.680 x 460 (Ø) - Peso Kg. 23 ca. - Base di contenimento flaconi, gruppo di controllo e prelievo campione, coperchio con ganci di chiusura e maniglie di trasporto
Termostatazione: Tramite inserimento di ghiaccio nel vano di contenimento flaconi
Gruppo di prelievo: Pompa per vuoto a membrana per spurgo, aspirazione e aerazione. (regolazione via SW della potenza) Velocità media di aspirazione 60cm/sec. (con prevalenza 5mt.) - Max prevalenza di aspirazione: 6,0 mt. Pressione 1bar. Diam. Int. Tubo di campionamento 1/2"
Su richiesta: Pompa Peristaltica ad alta precisione. Volume di prelievo regolabile via SW. Sensore di presenza liquido incorporato.
Altre caratteristiche (Unità di controllo, Programmazione, Interfaccia, Unità dosatrice) come SPII.

Mini-MAXX — Testata di campionamento

Testata di campionamento estremamente compatta per prelievo di campioni in pozzetti o tubazioni non in pressione, tramite pompa peristaltica. Alimentazione a batterie ricaricabili o diretta da rete.

Alloggiamento: Plastica rinforzata con fibra di vetro e maniglia di trasporto
Unità di controllo: a Microprocessore
Programmazione: Tutti i dati di campionamento sono inseriti, tramite un Software dedicato, all'interno di una chiave EEPROM da collegare successivamente al campionatore per avviarne il ciclo di lavoro
Interfaccia: Ingresso digitale da misuratore di portata lanciaimpulsi (opt. Ingresso analogico 0/4-20 mA.)
Gruppo di prelievo: Pompa Peristaltica ad alta precisione. Volume di prelievo regolabile via SW. Sensore di presenza liquido incorporato. Max Prevalenza di aspirazione ca. 6,0 mt.
Dimensioni: mm 160 x 260 x 100 – Peso Kg. 5,5 ca.
Alimentazione: 12Vcc con batteria ricaricabile o da rete a 220V tramite caricabatteria
Temperatura ambiente: 0 ÷ +40°C

Kanal-MAXX — Campionatore per eventi di pioggia

Funzionamento senza alimentazione elettrica, applicabile anche in zone a rischio di esplosione..

Alloggiamento: Plastica PVC
Attivazione: In relazione al livello del liquido. L'apertura della valvola di ingresso del tubo di prelievo avviene tramite lo "scioglimento" di una particolare pasticca posta all'interno.
Interfaccia: Ingresso digitale da misuratore di portata lanciaimpulsi (opt. Ingresso analogico 0/4-20 mA.)
Metodo di prelievo: Per aspirazione. Serbatoio sotto vuoto da 2,5 lt.
Dimensioni: mm 600 x 145 Ø – Peso Kg. 2 ca.
Temperatura ambiente: 0 ÷ +40°C

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CHEMITEC s.r.l.
50018 Scandicci FIRENZE - Via Isaac Newton 30
Tel. +39 (0) 55 756645 - Fax +39 (0) 55 756697
www.chemitec.it e-mail: info@chemitec.it

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If you require any further information, please do not hesitate to contact us:

Addr: Doseuro (UK) Limited
Unit 8, East Road Industrial Estate
East Road
Sleaford
Lincolnshire
NG34 7EH

Tel: +44 (0) 1529 300 045
Fax: +44 (0) 1529 410 967

Email: sales@doseuro.co.uk

Web: http://www.doseuro.co.uk

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Via Isaac Newton 28
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web site: www.chemitec.it
e-mail:info@chemitec.it