Chemitec
world class water monitoring series 35

MAIN CHARACTERISTICS

- Measurement of Dissolved Oxygen
- Measuring of Temperature using the PT100/PT1000 (NTC optional) probe
- Automatic Compensation of Temperature
- Programming key pad with 5 keys
- "CAL" Function Key to direct access to the calibration menu
- LCD Graphic display 128x64 with background illumination
- Internal Data Logger (flash 4 Mbit) with the possibility of graphic and table visualisation of measurement trends
- PID adjustment
- Serial outlet RS485 MOD BUS RTU
- Data download on USB key (optional)
- 1 Programmable Analogical Outlets
- 2 Relay Outlets for intervention thresholds
- 1 Relay Outlet for Instrument Anomaly Alarm or Temperature Set Point
- 1 Relay Outlet for Probe Washing or Temperature Set Point
- 1 Digital Entrance for disabling of doses

➢ ***Main hardware characteristics of the electronic device***

The hardware structure of this periphery is based on the adoption of extremely new CPU CMOS with 16 bits developed specifically for the execution of the so-called "embedded" applications.

The card uses an EEPROM to store the Set-up data and flash memories for storage of the archives of historical data and LOG files of events.

The Card has 1 RS485 gate (opto-isolated) for local networks used for connections with local communication devices (configuration computer, terminals and remote controls etc).

The card integrates a Real Time Clock (clock with date) that allows the software to storage figures in a chronological order.

➢ ***The device has been designed to be fitted onto a panel, and is built with IP66 protection panel.***

3582 Dissolved Oxygen and Temperature
Data Sheet

Characteristics of the measure

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Measurement Ranges / Resolution / Accuracy	Oxygen: 00.0 ÷ 40.0ppm / mg/l O_2 - 000 ÷ 200 % SAT Resolution ± 0.1 ppm/mg/l 1%SAT Accuracy: ± 0,5% f.s. Temperature: 0.00 ÷ +50,0 °C Resolution:± 0,1 °C Accuracy: ± 1% f.s.
Temp. Compensation	Via sensor incorporated in the O_2 Probe

Visualization	Simultaneous values of the Dissolved Oxygen
	  measure: numeric + bargraph.
	Temperature values and anolgue outputs values in scrolling.
	Graphic icons showing: digital outputs' state, data storage, washing cycle,
	  alarms

Software features and functions

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Data storage	Internal Flash 4Mbit Memory (near to 16000 records).
	Records interval: 01:00 ÷ 99:99 min
	  Type: Circular (F.I.F.O.) or Filling
	Possibility of visualization of the stored data in tabular and graphic form,
	  with indication of maximum, minimum and average values of the selected
	  period.
	Zoom function

1 Analogue Outputs	Output 1 programmable for Oxygen

2 Active Digital Outputs	Set Point ON – OFF : working range setting (Hysteresys / direction) and
	  pause/working time setting: 000 ÷ 999 Seconds
	  PID Regulation (only on Set point 1): Pulse Frequency or PWM

Alarm digital output	Reporting: Instrumental anomalies, minimum, maximum, set point's delay,
	  permanence time (live check)
	Delay time: 00:00 ÷ 59:99mm:ss at minimum steps of 15sec
	  Permanence time: 00:00 ÷ 99:99 hh:mm
	Set Point disableing (in case of alarm): Enable / Disable
	  Relays functioning: Closed / Open

Digital output for electrode washing	Programming of the time leg Frequency: 00:00 ÷ 24:00 hh:mm minimum time leg: 15 min During the washing phase, all digital and analogue outputs are freezed
Digital input	To disable dosages or activate washing cycle
RS485 Serial output	For set-up and real-time data acquisition from remote or for stored data download (using a dedicate-SW).
Manual controls	Possibility to simulate all analogue and digital outputs using the keyboard

Hardware Features

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Visualization	LCD graphic backlit Display STN 128x64
Programming	5 bubble-Keys keyboard
Data Logger	Flash 4Mbit Memory (near to 16000 records).
Analogue Output	0 / 4.00 ÷ 20.00 mA Galvanic separation: 1KV Optoisolator Maximum load 500 Ohm Second Alarm output: NAMUR 2.4 mA (with 4/20mA Range)
Digital Outputs	Switching Relays Max resistive load 3A a 230Vac Usable as NO contact
Digital Input	Active and already supplied Possibility to link with a 3 wires - inductive sensor
Serial Output	RS485 with 1200÷38400 Baud Rate programmable speed MOD BUS RTU Protocol
Operating conditions	Operating temperature 0÷50 °C Storage and transport -25÷65 °C Humidity 10-95% (non-condensing)
Power Supply/ Electrical protections	Power supply 90÷260Vac/dc 50-60Hz – (Optional 24Vac/dc) – Transformer isolation4KV – Absorbing average < 6W – Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

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➤ *Mechanical dimensions*
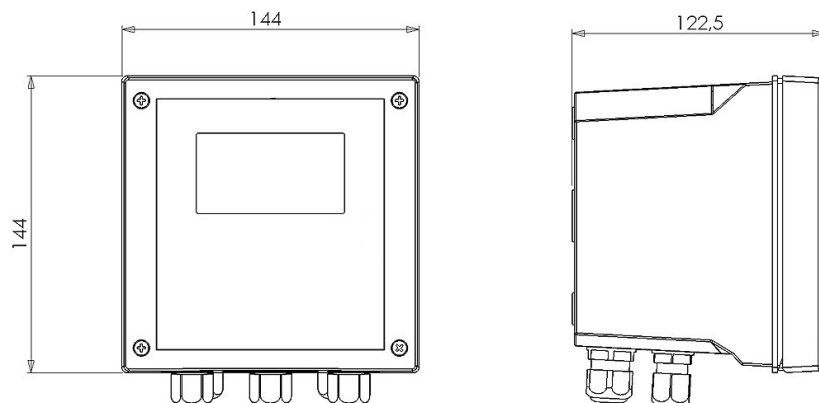
Mechanical Dimensions	3582 Wall IP66
Dimensions (L x H x P)	144x144x122,5mm
Mounting thickness	122,5mm
Material	Grey ABS RAL 7045
Mounting	Wall
Weight	1 Kg
Front Panel	UV resistant Polycarbonate
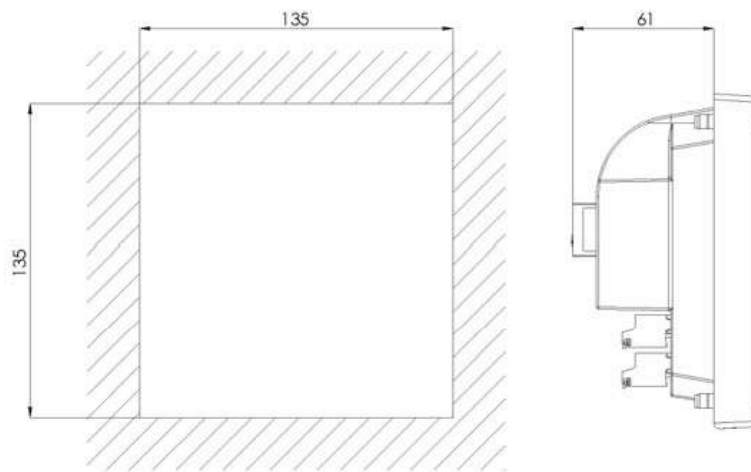
Mechanical Dimensions	3582 Panel 144x144
Dimensions (L x H x P)	144x144x86,5mm
Mounting thickness	61mm
Material	Grey ABS RAL 7045
Mounting	Panel
Weight	0,7 Kg
Front Panel	UV resistant Polycarbonate
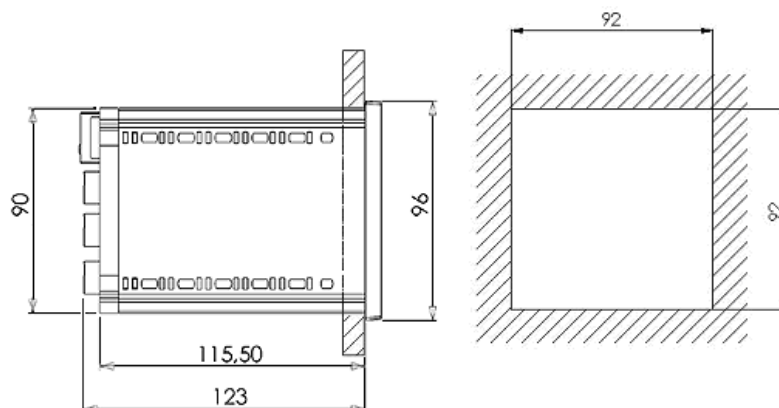
Mechanical Dimensions	3582 Panel 96x96
Dimensions (L x H x P)	96x96x115,5mm
Mounting thickness	130mm
Material	Black ABS
Mounting	Panel
Weight	0.7 Kg
Front Panel	UV resistant Polycarbonate

> ### Controls, indicators and connections
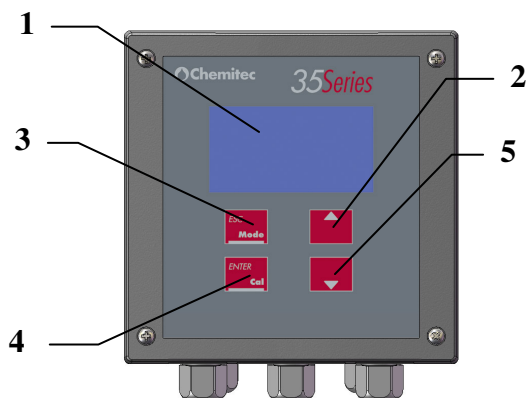
Frontal panel, wall mounting version
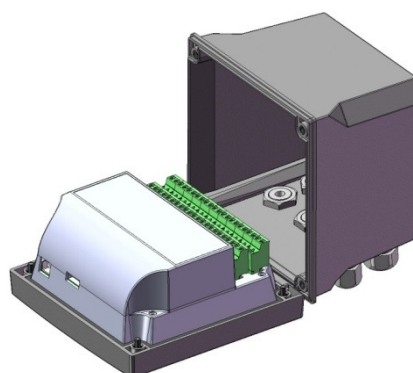
Access to the terminal connections

1. Display LCD
2. UP
3. ESC
4. ENTER
5. DOWN

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