Controllers
Sensors
Analysers
Samplers
Flow
Level
Pressure
Web remote control
Data logging
Accessories

PLUG & PLAY MULTIPARAMETRIC INSTRUMENT

Complete and flexible system for a wide range of applications in water treatment with easy to use software and automatic recognition of sensors: **available in three configurations, up to two (2), four (4) and eight (8) simultaneous measurements, freely selectable.**

Equipped with two RS485 serial ports: one (1) for **sensors with RS485 digital interface and MODBUS RTU protocol** and one (1) opto-isolated for the connection with the communication devices (Setup Computer, Remote Control Terminals etc.) of the local networks.

Incorporates a **Real Time Clock (clock with date)** which allows the software to archive the data chronologically to the flash memories also used for storing LOG files of the events.

50 SERIES

Connectable to

the whole range of Chemitec digital sensors and expandable to the traditional electrodes/probes through digitizers AD Series

Measures

pH/ORP
Dissolved Oxygen
Conductivity
Turbidity
Suspended Solids
Chlorine
Chlorine Dioxide
Ozone
Chlorites
Hydrogen Peroxide
Peracetic Acid
Nitrates (ISE)
Nitrates (UV)
Organic Substances (UV)
Color (UV)
PAH*/OIL (UV-Fluorescence)
*Polycyclic Aromatic Hidrocarbon

User Interface (HMI)

Programming keypad with 5 bubble-keys with
• CAL Key for direct access to the Calibration menu
• GRAPH/USB Key for direct access to the Measure graphs and for data download to USB PENDRIVE
• MODE Key for self-recognition of sensors

Graphic TFT color LCD resolution 480x272 visible area 95x93 which allows the simultaneous display of digital measurements

Software & Functions

Internal Data Logger (flash 64 Mbit) with possibility to store up to 250.000 records and to display stored data in tabular and graphic form. Data download to USB PENDRIVE or through RS485 and C_NET dedicated SW.
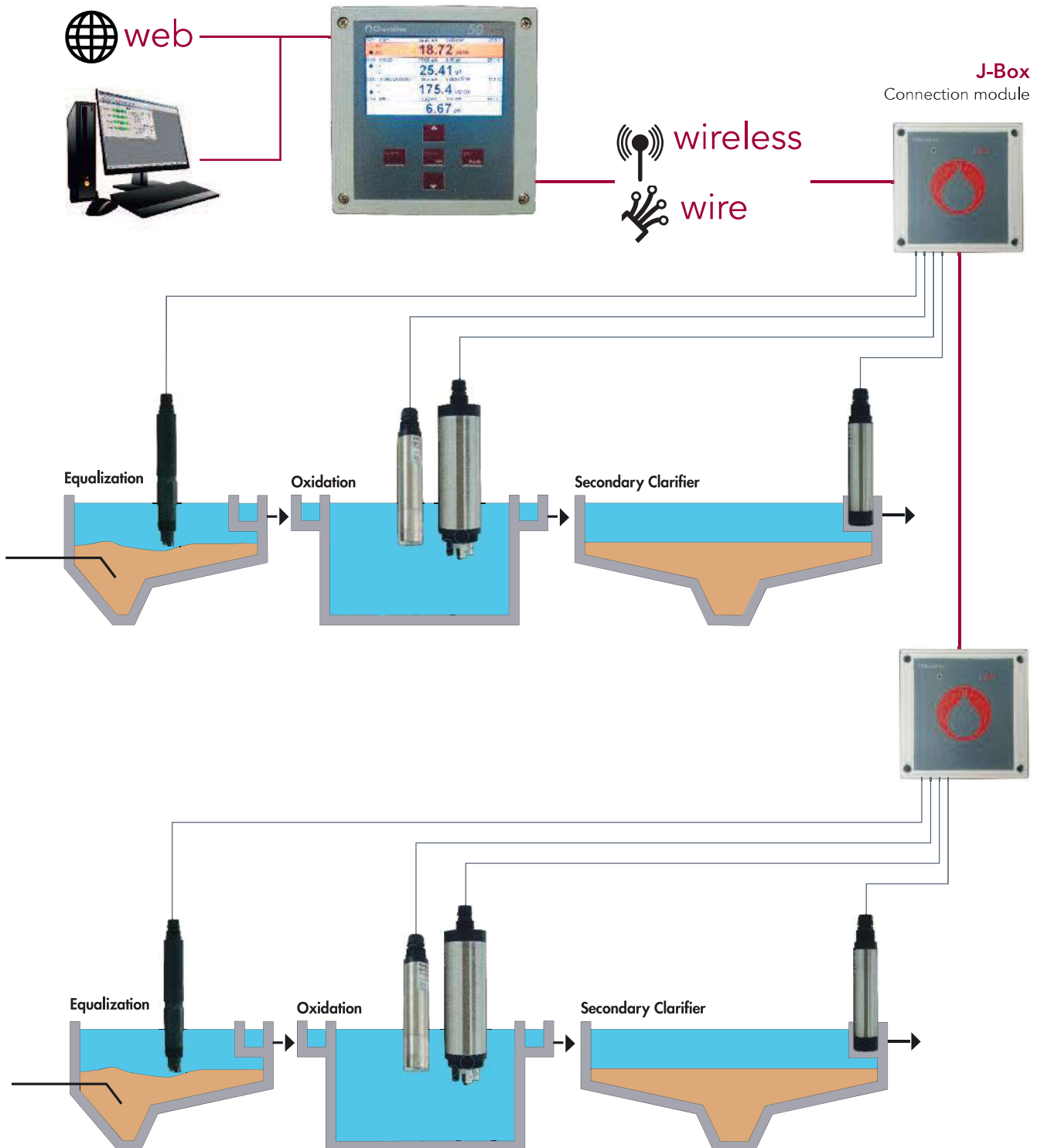
Programmable Analog Outputs for repeating the measurements, PID control and temperature; with the first and the second set on the measurement of the same parameter, the third can be set as the average of the other two.a

Digital Output Relays to adjust the Set Points for the measures, the alarm for instrument anomaly, the probe washing or the Set Point for temperature

Analog Input for perturbative functions or engineered display of additional measuring

Digital Input for disabling of dosage

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50 SERIES Possible layout up to 8 sensors

web

wireless

wire

J-Box
Connection module

Equalization

Oxidation

Secondary Clarifier

Equalization

Oxidation

Secondary Clarifier

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Hardware features, software features and functions 50 SERIES

Display	Graphic TFT color LCD
Resolution	480 X 272 (Visible Area 95x93)
Languages	Italian, English, French, German, Spanish, Russian
Keypad	5 bubble-keys [▼] [▲] single keys and [GRAPH/USB] [ESC/MODE] [ENTER/CAL] keys with double functions available
Data Logger	Internal Flash 64Mbit Memory up to 250,000 records with a recording interval of 15 sec up to 120 minutes
Recording method	Circular (F.I.F.O.) or Filling
Display of stored data	In tabular and graphic form, with indication of maximum, minimum and average values of the selected period. Zoom function.
PID Control	Settable functions P [Proportional] ; PI [Proportional – Integral] and PID [Proportional – Integral – Derivative]
Activation	On analog or digital output
Proportional range	0…500%
Time	Integral and/or derivative 0:00…5:00 min
Analog Outputs	Four (4) programmable ; 0/4…20 mA ; Galvanic separation ; 1KV Optoisolator ; Maximum load 500 Ohm ; Output limits user programmable between measuring ranges
Alarm output	NAMUR ; 2.4 mA [with range 4…20 mA]
Digital Outputs	Six (6) ; Switching Relays usable as NO ; Maximum resistive load 3A at 230Vac
Set Point (4)	Working range setting (Hysteresis/direction) ; pause/working time setting 000…999 Seconds ; PID Control ; Pulse Frequency or PWM
Alarm/Wash (2)	Alarm: Instrument failure, min/max value, set point delay, permanence time (live check) ; Delay time ; Set Point disabling (in case of alarm): Enable/Disable
	Wash: Programmable interval (minimum 15 minuts) and duration between 00:00…24:00 hh:mm; during the washing phase, all digital and analog outputs are frozen

⬡ **Chemitec**

Hardware features, software features and functions 50 SERIES

Digital Inputs (2) **for Free contact**	To disable dosing or activate wash cycle
Power consumption	5mA max
Serial Ports/Outputs	RS485 programmable for set-up and Real Time data acquisition from remote or download stored data (using dedicated SW)
Baud Rate	1200…38400
Communication protocol	MODBUS RTU ; on request PROFIBUS DP SLAVE, CANopen, Ethernet, Devicenet, Modbus TCP, Profinet
Manual controls	Possibility to simulate all the analogue and digital outputs using the keyboard
Power Supply	90…240 Vac/dc 47– 63 Hz [on request 24Vac/dc]
Transformer isolation	4KV
Power consumption	< 6W
Electrical protection	EMI / RFI CEI-EN55011 – 05/99
Mounting	Wall
Housing material	ABS Gray RAL 7045
Dimensions (L x H x P)	144 x 144 x 122.5 mm
Mounting depth	122.5 mm
Mechanical protection	IP 66
Weight	1 Kg
Operating temperature	0…50 °C
Humidity	10…95% non-condensing
Storage and transport	-25…65 °C

Communication protocol

MODBUS RTU (standard) for set-up, Real Time data communication or download of the stored data through C_NET dedicated software

Upon request PROFIBUS DP ; CANopen; Ethernet; Devicenet; Modbus TCP ; Profinet

C_NET SW

Data Download to USB