



SENSORS &
CONTROLLERS



ANALYZERS
& SAMPLERS



LEVEL, FLOW
& PRESSURE



WEB APP &
DATALOGGING



ACCESSORIES

80 SERIES DATASHEET

PLUG & PLAY CONTROLLER



MAIN FEATURES

- Up to 12 simultaneous measurements, freely selectable. 8 digital probes with M12 connectors.
- Equipped with two RS485 serial ports: One for sensors with RS485 digital interface and Modbus RTU or TCP or Profibus protocol and one opto-isolated for connection with local network communication devices.
- Real-time clock allows software to archive data chronologically to flash memory
- Simultaneous display of digital measurements via 800x480 RGB Colour touch display
- Internal data logger with 500,000-record capacity
- 8 Programmable analogue outputs for repeating measurements, PID control and temperature
- 8 Digital output relays for set point adjustment
- Analogue input for perturbative functions or engineered display of additional measuring
- Digital input for disabling of dosage

APPLICATIONS

- pH/ORP
- Dissolved oxygen
- Conductivity
- Inductive Conductivity
- Turbidity
- Suspended solids
- Chlorine
- Chlorine dioxide
- Ozone
- Chlorites
- Hydrogen peroxide
- Peracetic acid
- Nitrates (ISE)
- Nitrates (UV)
- Organic substances (UV)
- Colour (UV)
- Chlorophyll
- PAH/OIL (UV-Fluorescence)
- ISE, ammonium, potassium, chlorides

CHEMITEC S.R.L.

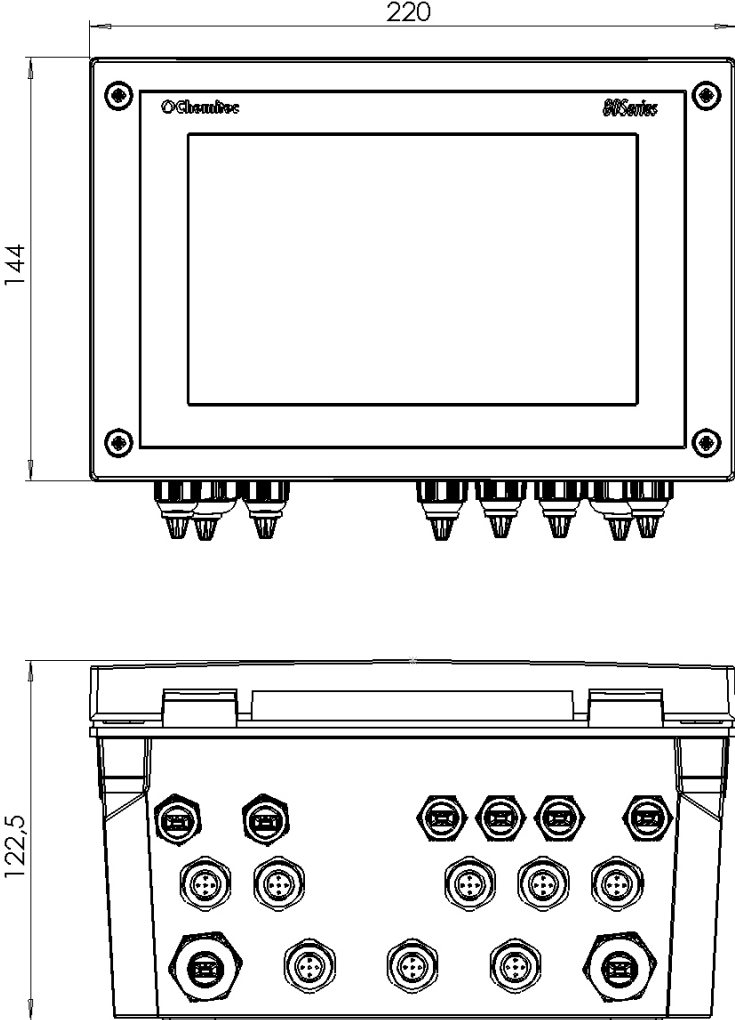
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80 SERIES DATASHEET

TECHNICAL DATA

Data storage	Internal Flash 64Mbit Memory 500000 record. 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 max, min and average values of the selected period. Zoom function
PID Regulation on mA outputs	Functions: P – PI – PID. Activated on the analogue or the digital output. Proportional range: 0 ÷ 500%
8 Analogue Outputs	freely programmable with possibility of PID management
8 command digital outputs	Set Point ON – OFF : working range setting (Hysteresys / direction) and pause/working time setting: 000 ÷ 999 Seconds PWM. Load max 1A 230Vac
Alarm digital output	Reporting: Instrumental anomalies, minimum, maximum, set point's delay, permanence time (live check) timed warning on probe calibrations and the possibility of displaying the data and time of the last calibration is provided. The instrument warns on the screen when a new calibration is due.
Digital output for Electrode washing or Temperature set point	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 freed
RS485 Serial output	For set-up and real-time data acquisition from remote or for stored data download (using a dedicate-SW). MODBUS RTU communication protocol
Manual controls	Possibility to simulate all the analogue and digital outputs using the touch
Visualization	7" TFT LCD graphic colour display 800x480 RGB with resistive touch 16:9
Programming	Touch Screen Data Input
Data Logger	Flash 64Mbit Memory (500000 records).
Wi-Fi	Wi-fi direct, for data record download
Languages	Italian, English, French, German, Spanish
Analogue Outputs	Eight (8) programmable; 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	Digital Outputs: Eight (8); Exchange relays usable as NO; maximum resistive load 1A at 230Vac
Digital Input	Two (2) for dosage disabling or washing cycle activation Input voltage 24 Vdc /ac Absorption 10mA max
2 Analogue Input	4-20mA Analogue Input freely programmable
2 mV Input	For Ph or ORP analog electrode
1 Input	For analog PT 100 or PT 1000 Temperature sensor
1 Input	For analog Conductivity Probe
1 Usb port	For firmware upgrade or data download
Serial Output	RS485 with 1200÷38400 Baud Rate programmable speed MOD BUS RTU Protocol
Operating conditions	Operating temperature -10÷50°C Storage and transport -25÷65°C Humidity 10-95% (non-condensing)
Power supply/ Electrical protections	Power supply 90÷240Vac/dc 47- 63 Hz – Transformer isolation 4KV – Absorbing average < 20W – Electrical Protection: EMI / RFI CEI-EN55011 – 05/99

DIMENSIONS



Dimensions (L x H x P)	220 x 144 x 122,5 mm
Mounting thickness	122.5mm
Material	Red ABS "RED65" CIELAB
Mounting	Wall
Weight	1 Kg
Front Panel	UV Resistant Polycarbonate

HARDWARE CHARACTERISTICS OF THE ELECTRONIC DEVICE

The hardware structure of this periphery is based on the adoption of extremely new CPU CMOS with 32 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 for sensors and 1 RS485 gate (opto-isolated) for local networks used for connections with local communication devices (configuration computer, terminals and remote controls etc).

As an optional it is possible to install one PROFI BUS or ETHERNET serial output for the connection with devices having respectively PROFI BUS and ETHERNET communication.

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.