



REVOLUTIONISING THE METHOD OF BIOCHEMICAL OXYGEN DEMAND MEASUREMENT

BOD is a measure of the DO consumed by micro-organisms during the oxidation of bio-degradable substances in waste waters. A high BOD would therefore imply a higher depletion in the DO content. Water with high BOD if discharged into common streams and rivers, will starve the rest of the aquatic life. Waste water is therefore treated to bring down the BOD value to levels below those prescribed by pollution regulatory bodies.

BioSens uses a revolutionary BOD measuring technique. This technique helps to determine the BOD value within 40 minutes in contrast to the 3 or 5 days required by the BOD3 and BOD5 methods.

MAIN ADVANTAGES OF THE BIOSENS ARE

- Unique technique of BOD measurement using Patented Bio Sensors
- Actual measurement of BOD with biodegradation of contaminants in sample
- Measurement of BOD in just 40 minutes
- No need of Dilution/Incubation/Titration
- Enhanced control over water recycling processes, with increased efficiency
- Daily records of BOD levels of effluent plant can be maintained which will help statutory bodies work better.



SPECIFICATIONS:

Computation unit

- Parameter : BOD in mg/l units
- BOD range : 0 to 20,000 mg/l
- Displayable range : 0 to 20,000 mg/l
- Accuracy : $\pm 10\%$ of measured value (over 20 to 20,000 mg/l range only)
- Time to BOD result : Preparation time : 2 hrs
Measurement time for Sample : 40 min
- User interface : graphic touch-screen
- Communication ports : USB2.0 - 1 : Printer port (only for supported printers)
USB2.0 - 2 : External memory
Ethernet: Email report, view web pages, FTP report
- Power consumption : < 20VA
- Power supply : 230VAC +10% -15%
- Power source : UPS 230VAC +10% -15%
- Ingress protection : Touch screen : IP65
Rest : IP20
- Operating temperature range : 20-30° C (Room AC strongly recommended)
- Sample temperature range : Typical laboratory ambient 20-30° C
- Approvals & certifications : EMI-EMC compliant
- User interface access : » Operator
» supervisor
» Engineer

Sensor unit

- Mounted DO probe
- Rinse basin
- Magnetic stirrer

Support kit

- High purity Calmix1, Calmix2, Bufmix1 and Bufmix2
- DO probe set
- Micro pipette with disposable tips
- Nylon sheets, O-rings, Beakers, Weighing boats, Tissue wipes, Washing bottle

Optional equipment

- UPS APC make RS600 model (mandatory to use UPS with quasi-sinewave output)
- Mini cooler (Mandatory to store membrane and nylon sheet in refrigerator)

Customer setup pre-requisites

- UPS 230VAC +10% -15% with quasi-sinewave output
- Work space temperature: Normal working ambient
- Digital weighing scale: at least 1mg resolution
- Oven: 100-120° C
- Domestic refrigerator: 5-15° C non-freezing temperatures
- Analytical grade water
 - » 6.85 to 7.15 pH
 - » Resistivity > 10 MW.cm
 - » TOC < 30ppb