## TRITECH MEASUREMENT BUOY MB90-B



- Fully automated for in-site surface water quality
- Quick deployment and high mobility, easy for multiple sites monitoring
- Designed for ease-of-use
- Standard parameters (Ammonia & COD), with options to customize
- Independently powered by solar with low power design
- Suitable at rivers or lakes

Tritech real-time monitoring station is a fully automated monitoring system, which automatically measures and transmits the data over the internet via GSM/GPRS/3G network.



To check the real-time data instantly, customer just need to install Tritech DAQ plugmaster software in any server that is linked to internet. Upon receiving the data, the software checks for error, verifies its validity, before proceeding to write into SQL database that is installed in the customer's server.



## User

Customer can access the data any time in any of the electronic device, by connecting to the SQL database directly via standard SQL query. Data viewable includes real-time value of any parameter, system operating status like system voltage, data logger's health and etc. This great feature enables the customer to have in-time and in-depth information about the far-away monitoring station, without having the hassle to go down and download the data manually.

| Technical specification for standard parameters |                                  |               |                  |            |                       |  |
|---|----------------------------------|---------------|------------------|------------|-----------------------|--|
| Parameter                                       | Measuring<br>Principle           | Range         | Accuracy         | Resolution | Reference<br>Standard |  |
| NH4-N   | ISE with potassium               | 0.20 mg/L N   | ±3% or ±0.5 mg/L | 0.02mg/L-N | HJ/T91-2002           |  |
|   | compensation                     | 0 - 20 Mg/L-N |                  |            |                       |  |
| COD   | UV Vis spectrometry 220nm -720nm | 0 - 500 mg/L  | ±3%              | 0.6 mg/L   | HJ/T91-2002           |  |

| Technical specification for option parameters |                                  |                |                  |            |                       |  |
|---|----------------------------------|----------------|------------------|------------|-----------------------|--|
| Parameter                                     | Measuring<br>Principle           | Range          | Accuracy         | Resolution | Reference<br>Standard |  |
| NO3   | ISE                              | 0 – 100 mg/L-N | ±3% or ±0.5 mg/L | 0.01mg/L-N | HJ/T91-2002           |  |
| TOC   | UV Vis spectrometry 220nm -720nm | 0 – 150 mg/L   | ±3%              | 0.1 mg/L   | N/A                   |  |

| Structure Parameters |                                    |  |  |  |
|----------------------|------------------------------------|--|--|--|
| Dimension            | 700mm (Diameter) * 1950mm (Height) |  |  |  |
| Material             | Stainless Steel, HMW-HDPE          |  |  |  |
| Weight               | 60 kg                              |  |  |  |
| Structure Safety     | Surface Wind Force < 4             |  |  |  |

| System Parameters     |  |  |  |
|-----------------------|--|--|--|
| Power Source          | Solar Power 50W                                  |  |  |
| System Operating      | 14 days of continuous operation without sunlight |  |  |
| Operating Temperature | ·-20°C ~ 70°C                                    |  |  |
| Safety Indication     | IALA standard marine light                       |  |  |
| System Safety         | Real-time anti-theft alert                       |  |  |
| Communication         | Wireless GSM/GPRS/3G network                     |  |  |
| Data format           | HJ/212-2005, GB/T16706-1996                      |  |  |

## Application



The measurement buoy of MB90-B is best for:

Type B: Reservoir

Type C: Water Treatment Plant

## **Project Profile**

| Project Name               | Supply,install and commission online reservoir monitoring platform<br>for Bedok Reservoir (COQ No: 4090105) |
|----------------------------|---|
| <b>Project Description</b> | 1 Floating Buoy Water Quality Monitoring System   |
| Customer                   | Singapore Public Utilities Board  |
| <b>Contract Period</b>     | 2009-02-20 - 2010-05-15   |