

# TRITECH LAKE PROFILER MP1200

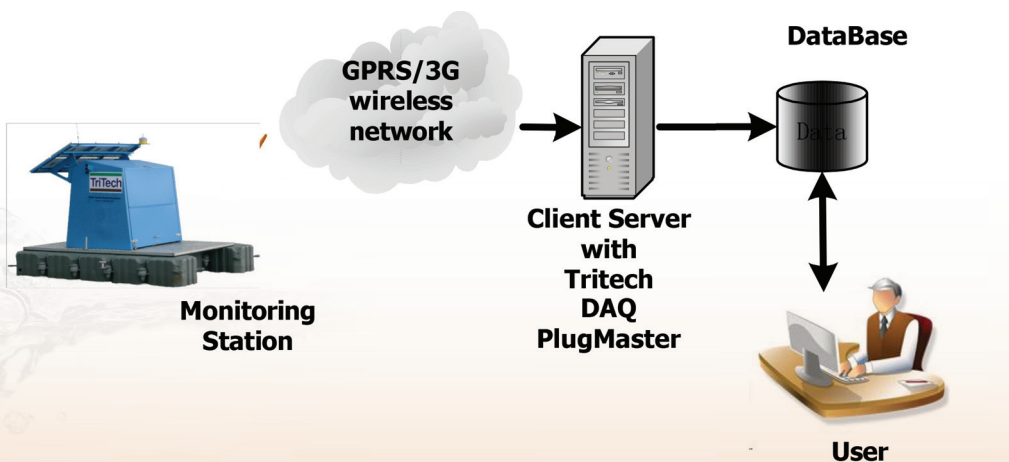


- Fully automated vertical in-situ water quality profiling
- Stable floatation platform with high buoyancy
- Designed for multiple depths monitoring
- Standard parameters (Temperature, pH, DO, conductivity, turbidity, NO3), with option parameters (chlorophyll and BG Algae)
- Independently powered by 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.



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 Principle	Range	Accuracy	Resolution	Reference Standard
Temperature	Thermistor	-5° - 50°C	±0.1°C	0.01°C	HJ/T91-2002
Optical DO	Fluorescence	0 - 25 mg/L	±1% or ±0.02 mg/L	0.01mg/L	N/A
Conductivity	Graphite Electrode	0 - 100 mS/cm	±1%	4 digits	HJ/T91-2002
pH	Glass Electrode	0 - 14 units	±0.2 units	0.01units	GB6920-86
Turbidity	Optical 90° Nephelometric	0 - 3000 NTU	[0-100NTU]< 1%	0.1NTU	USEPA180.1 EN ISO 7071
			[100-400NTU]< 3%		
			[>400NTU]< 5%		
Depth	Pressure	0 - 10m	±0.01m	0.01m	GB/T15966-1995
		0 - 25m	±0.025m	0.01m	
		0 - 50m	±0.05m	0.01m	
		0 - 100m	±0.1m	0.01m	
		0 - 200m	±0.2m	0.01m	
NO3	ISE	0 - 100 mg/L-N	±10% or ±2 mg/L	0.1mg/L-N	HJ/T91-2002

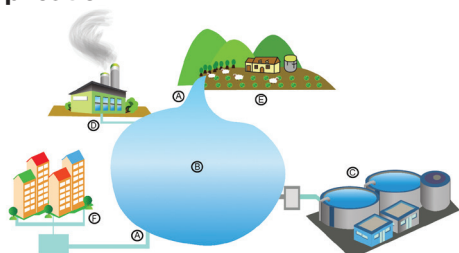
Technical specification for standard parameters					
Parameter	Measuring Principle	Range	Accuracy	Resolution	Reference Standard
Chlorophyll a	Fluorescence	0.03 - 500 ug/L	±3%	0.01 ug/L	N/A
Blue Green Algae	Fluorescence	100 - 2M cells/mL	±3%	20 cells/mL	N/A

Structure Parameters	
Dimension	2040mm*2040mm*1640mm
Material	Stainless Steel, HMW-HDPE
Weight	130 kg
Buoyance	Add-on 150 kg
Structure Safety	Surface Wind Force < 6

Winching Parameters	
Depth Range	5m - 20m
Depth Step	2m / 5m
Winching Load	10 kg
Winching Safety	Flow Speed < 1.2m/s

System Parameters	
Power Source	Solar Power 240W
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 lake profiler MP1200 is best for:

Type B: Reservoir

## Project Profile

<b>Project Name</b>	Servicing and Maintenance of Lake Diagnostic Stations in Marina Reservoir - PUB000ETQ09000306
<b>Project Description</b>	4 Lake Profiler Water Quality Monitoring System (pH, temperature, DO, conductivity, turbidity, ammonium, chlorophyll, blue green algae)
<b>Customer</b>	Singapore Public Utilities Board
<b>Contract Period</b>	2009-04-01 - 2010-03-31