

# iLab

## **Rugged Multi-Parameter Analyser**

iLab multi-parameter analyser suitable for long-term monitoring of up to 7 parameters simultaneously, including: Temperature, Depth, pH, ORP, Conductivity & Salinity & TDS, Turbidity, DO, Chlorophyll, Blue-green algae, Ammonia nitrogen, Nitrate nitrogen, Chloride ions, and Fluoride ions.

Built-in GPS receiver and USB interface; with optional bluetooth function delivers unparalleled functionality. Designed for ease of use with an easy to hold ergonomic curve, and high impact rubber gaskets and IP68 rating makes the iLab the most suitable field partner on the market.

#### **Features:**

- IP68 high impact environmental enclosure.
- LCD real time screen as standard.
- Fast onboard processing power.
- Configurable sampling intervals to optimise operating. duration and reduce the overall power consumption.
- Self-cleaning system allows iLab to obtain accurate data for longer.
- Store over 100,000 data points on the device.

### **Applications:**



- Multi-Parameter water quality online monitoring of rivers, lakes and reservoirs.
- Water quality monitoring of drinking water source, ground water and sea water.
- Environmental Monitoring.
- Agricultural.





Environmental Data Services
Ph: 1300 721 683

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## **Rugged Multi-Parameter Analyser**

## **Specifications:**

#### **Communicator Physical Indicators**

Display	3.5-inch color display screen with adjustable backlight		
Data storage	More than 100,000 data		
Material	ABS+PC		
Power supply	Built-in battery power, battery specifications: 4 3.7V rechargeable lithium battery		
Protection level	IP67		
Operating & Storage temperature	0~50°C (Non-freezing) ,-15~60°C		
Size&Weight	203*100*43mm,0.5KG		

#### **Standard Electrode Parameters**

pH Sensor:		Temperature:		
Principle	Glass electrode method	Principle	Thermistor method	
Range	0-14 pH (With ion electrode:5~10 pH)	Range	0°C~60°C (Mainframe's work temp. 0~40°C)	
Resolution	0.01 pH	Resolution	0.01℃	
Accuracy	±0.1 pH	Accuracy ±0.5°C		
Conductivity sensor :		ORP Sensor:		
Principle	A pair of platinum gauze electrode	Principle Glass electrode method		
Range	1us/cm-2000 us/cm (K=1) 100us/cm-100ms/cm (K=10.0)	Range	-1000mV ~+1000mV	
Resolution	0.1us/cm~0.01ms/cm (Depending on the range)	Resolution	1mV	
Accuracy	±3%	Accuracy	±5mV	
DO sensor:		Turbidity sensor:		
Principle	Fluorescence	Principle	Light scattering method	
Range	0 -20 mg/L; 0-20 ppm; 0-200%	Range	0-1000NTU	
Resolution	0.1%/0.01mg/l	Resolution	0.1NTU	
Accuracy	±3% or ±0.3 mg/L, whichever is greater	Accuracy	± 5% or 0.3NTU, whichever is greater	
Chlorophyll sensor:		Blue-green algae sensor:		
Principle	Fluorescence	Principle	Fluorescence	
Range	0-500 ug/L	Range	200-300,000cells/mL	
Resolution	0.01 ug/L~0.1 ug/L, Depending on range	Resolution	20cells/mL	
Accuracy	$\pm 5\%$ of the signal level corresponding value of 1ppb Rhodamine B Dye	Accuracy	$\pm 10\%$ of the signal level corresponding value of 1ppb Rhodamine B Dye	



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## **Specifications:**

Ammonia S	Ammonia Sensor :		Nitrate Sensor :	
Principle	Ion selection	Principle	Ion selection	
Range	0.1~1000mg/L-N	Range	0.5~1000mg/L-N	
Resolution	0.01mg/L-N	Resolution	0.01mg/L-N	
Accuracy	±5% or ±0.2mg/L	Accuracy	±10% or ±0.2mg/L	
Chloride Sensor:		Fluoride Sensor:		
Principle	Ion selection	Principle	Ion selection	
Range	3~1000mg/L	Range	0.5~1000mg/L	
Resolution	0.01mg/L	Resolution	0.01mg/L	
Accuracy	±10% or ±0.2mg/L	Accuracy	Accuracy ±10% or ±0.2mg/L	
Depth (Pres	Depth (Pressure):			
Principle	Pressure-sensitive Method			
Range	0-61m(Maximum withstand pressure depth:30M)			
Resolution	2cm			
Accuracy	±0.3%			

# **Sensor Housing Specifications:**

Power Supply	9-36VDC	<b>Measuring Temperature</b>	0~40°C (non-freezing)
<b>Power Dissipation</b>	3W	Storage Temperature	0~50°C (non-freezing)
<b>Communication protocol</b>	Communication protocol MODBUS RS485 Protection Class		IP68
Size	Diameter 90*Length 640.5mm	Weight	3KG
Maximum withstand pressure depth	30M(With ion selective electro de: 10 m)	Battery capacity	8 sections, 8C, 3.6V lithium battery





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