

# Portable Water Quality Meter Model WQC-24



# **DKK-TOA CORPORATION**





Compact 45mm Sensor Probe

# Turbidity Sensor Temperature Sensor Non-Flowing DO Electrode Strong pH Electrode

Standard Sensor Module



# Measurement of up to 11 Simultaneous Parameters.

The Model WQC-24 is the latest development in DKK-TOA's range of multi-parameter water quality meters. The very latest technologies combined with more than 50 years experience have resulted in a compact, high performance and robust water quality monitoring system. The 45mm outer diameter sensor probe can provide measurement of up to 11 parameters simultaneously out of a total of 17 available parameters. The instrument also features an interface port for connection to a Global Positioning System (GPS), Local Area Network (LAN) printer or other communication peripherals.

### **Features**

### **Multiple Parameter Combinations**

The sensor probe can measure up to 11 parameters out of 17 available (pH, ORP, DO, EC, Turbidity, Temperature, Salinity, Total dissolved solids, Specific gravity and Water depth plus Chlorophyll and Ions of NO<sub>3</sub>-, Cl-, F-, Ca<sup>2+</sup>, K+, NH<sub>4</sub>+).

**Newly Developed High Performance Sensors** pH sensor is equipped with our "Strong" electrode and pressure compensator.

DO sensor is functional even under non-flowing conditions.

### **Compact Sensor Probe**

45 mm outer diameter sensor probe fits into a 2-inch well

# Robust Sensor Probe Resisting Sea water & High Pressures

Sensor probe facilitates measurements as far as 100 meters below the water surface and up to max pressure of 1 MPa (excluding ion sensors).

# **Data Logging Storage Capacity Exceeds One Month**

Built-in memory stores measured data for 35 days of continuous measurements (based on measuremnt every 15 minutes).

# Interface Port Compatible with Global Positioning System (GPS)

An interface port is available for connection to GPS, Printer, RS-232C, LAN, Cellular phone or other data communication peripherals.

# **Available Parameters**

Module		Э	Parameters	Display Range	Repeatability (Meter)	Measurement Method	Calibration
			рН	0~14	+/- 0.05 pH	Glass electrorde	2 or 3 point calibration at 4,7,9 pH
	s)	(suo	Dissolved Oxygen	0~20 mg/L	+/- 0.1 mg/L	Galvanic membrane electrode	Span calibration
Standard Module	out of ORP + lons)	s out of ORP + lons)	Conductivity	0~10 S/m (display) 0~100 mS/m 0~1 S/m 0~10 S/m (auto ranges)	+/- 1% FS	AC 4-electrodes	Span calibration (on demand)
and	ns (	2 items	Salt	0~4 %	+/- 0.1%		
St	Ion Module (Equipped with Max 3 items	with max 2 i	Total Disolved Solids	0~100 g/L	+/- 2 g/L	Converted from conductivity value	
			Seawater Specific Gravity	0~50 ot	+/- 0.1ot		
	y ⊳	ped	Temperature	-5~50 °C	+/- 0.25°C	Thin film platinum resistance	
	ippe	quip	Turidity	0~800 NTU	+/- 3% FS	Transmitted/scattered light	Zero & span calibration
	e (Equ	a) elnk	Fluoride ion	0.019~19000 mg/L			
	Inpo	Мос	Chloride ion	1~35000 mg/L	+/- 5% rda	Ion electrodes	2 point calibration
	lon Mc	Chlorophyll Module (equipped with max	Nitrate ion	0.62~62000 mg/L	- 7 07010g	18.11 61664.6466	
			Calcium ion	0.4~40000 mg/L			
			Potassium ion	0.39~3900 mg/L			
			Ammonium ion	0.09~1800 mg/L			
			Chlorophyll	0~400 μg/L	Resolution 0.1 µg/L	Fluorescence	Span calibration (on demand)
†	†	†	ORP	-2000~2000 mV	+/- 5 mV	Platinum electrode	
‡	‡	‡	Water Depth	0~100 m	+/- 0.1 m	Diapragm	Span calibration (on demand)

### Notes:

- † ORP measurement available as an option in all configurations. The ORP sensor chip replaces the standard pH sensor chip.
- ‡ Water depth measurement available as an option in all configurations.

For lon measurements, the sample must be first collected and the measurement carried out in the sample container. Ion measurement by directly immersing the probe into the field sample (such as river water) is not available.

collector type with common line).

# **Standard Specifications**

Product Name: Model: Display:	Portable Water Quality Meter WQC-24 LCD, Digital.	Data Storage:	Internal memory can store 14 parameters for 35 days (for measurement interval of 15 minutes).  Meter; 2 x AA size dry batteries or AC adapter.  Sensor; 3 x A3 dry batteries.  Meter; 187.5 (I) x 75 (w) x 37.5 (h) mm (approx., excluding projections).  Sensor; 45 (OD) x 408 (I) mm
Waterproof Construction:	Meter: IP-67, JIS C0920 (assuming cable is connected). Sensor Module: Waterproof up to 1 MPa pressure.	Power Source:	
Interface Port:	Standard RS232C, can be extended to printer, GPS, LAN or cellular phone.	Outline Dimensions:	
Analogue Outputs:	DC 0~1V, 2 channels selectable from measured parameters (common line).	Weight:	Meter; 320g (approx.). Sensor; 1350g (approx.).
Digital Outputs:	One alarm output and one measurement timing output (DC36V, 100mA or less, open	Operating Temperature:	Meter; 0~40°C. Sensor; 0~50°C.

# **Standard Accessories**

- Alkali dry batteries, AA size (LR6), 5 pcs
- Buffer solutions for pH6.68 & pH4.01, 2 x 50mL bottles
- pH internal electrolyte solution, 50mL bottle
- Replacment junctions for pH electrode, 2 pcs
- Membrane sets for DO electrode, 2 sets
- DO internal electrolyte solution, 50mL bottle
- Special tools (spanner, driver), 1 set
- Calibration receptacles, 2 pcs
- Connector cap, 1 pcs
- Connector cap packing, 1 pcs
- Soft case (with shoulder belt), 1 pcs
- Connection cable (2m), 1 pcs
- Instruction manual, 1 copy

# **Options**

- ORP electrode
- Depth Measurement
- Fuloride ion electrode
- Chloride ion electrode
- Nitrate ion electrode
- Calcium ion electrode
- Ammonium ion electrode
- Potassium ion electrode
- AC adapter
- RS-232C cable
- Printer
- GPS system
- Data storage software
- Connection cable (10m, 30m,100m)

Due to continuous product improvement, specifications contained herein are subject to change without notice.



Always read the instruction manual before operation.

### International Operations:

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