

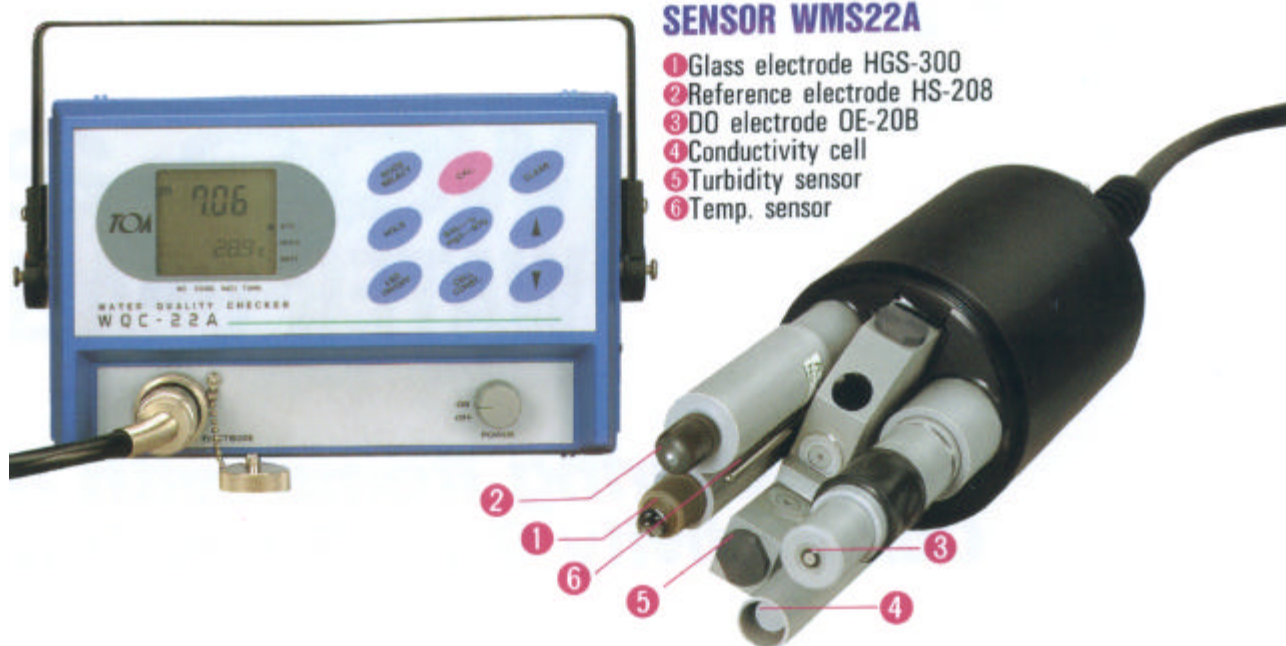
Introduction

The WQC-22A Water Quality Checker is an advanced, portable, multi-parameter instrument which can measure water quality in terms of six fundamental parameters. These are pH, conductivity, DO, turbidity, temperature and salinity. This instrument is suitable for a broad range of applications such as monitoring rivers, lakes & dams, agriculture, industrial effluent, sewage, seawater etc..



Features

- **Calibration by keypad entry**
Calibration can be easily carried out by pressing the MODE, SELECT and CAL Keys.
- **Drip-proof construction**
Can be used even in rainy conditions.
- **Salinity measurement available**
Based on conductivity reading.
- **Choice of conductivity units**
Either S/m or S/cm can be displayed.
- **Wide conductivity measurement range**
Two ranges enable wide measuring range.
- **Choice of turbidity units**
Both NTU (Formazine) or mg/L (Kaolin) are available.
- **Least significant digit (LSD) on/off feature**
The LSD of DO, pH & conductivity (low range) can be selected for display.
- **No extractive sampling required**
Sensor can be thrown into the water such as a lake, river, dam etc. (standard cable length: 2m).



SENSOR WMS22A

- ① Glass electrode HGS-300
- ② Reference electrode HS-208
- ③ DO electrode OE-20B
- ④ Conductivity cell
- ⑤ Turbidity sensor
- ⑥ Temp. sensor

High Performance Solid Sensor

- **pH**
Glass electrode method: Glass & reference electrode are cartridge type.
- **Conductivity**
AC 4 Terminal method: Reliable data can be obtained across a wide measurement range.
- **DO**
Galvanic cell method with pressure compensation: Cartridge type allows easy replacement.
- **Turbidity**
90° scattering light method: Intermittent emitting near infrared light source allows reliable data without being affected by water colour or ambient light conditions.
- **Temperature**
Platinum RTD provides temperature measurement and also temperature compensation for the other measurement parameters.
- **Salinity**
Conductivity conversion formula: Up to 4%.

Specifications

	Temp.	DO	pH	Conductivity	Turbidity	Salinity *1
Meas. Method	Platinum RTD	Galvanic Cell	Glass Electrode	AC 4 electrodes	90° scattering light	AC 4 electrodes
Meas. Range	0~50 °C	0~20mg/L	pH 0~14	(Hi) 0~7 S/m (0~70 mS/cm) (Lo) 0~200mS/m (0~2mS/cm)	0~8000 NTU 0~800 mg/L	0~4%
Resolution, LSD Off	0.1 °C	0.1 mg/L	0.1 pH	(Hi) 0.01 S/m (Lo) 1 mS/m	1 NTU, mg/L	(Hi) 0.01% (Lo) 0.01%
Resolution, LSD On	0.1 °C	0.01 mg/L	0.01 pH	(Hi) 0.01 S/m (Lo) 0.1 mS/m	1 NTU, mg/L	(Hi) 0.01% (Lo) 0.001%
Repeatability (indic)	±0.1 °C ±1 dig	± 0.1mg/L ±1 dig	± 0.02 pH ±1 dig	(Hi) FS± 2.5% ± 1 digit (Lo) FS ± 2.5% ± 1 digit		
Temp Comp Range		0~40 °C	0~50 °C	0~50 C, 2%/°C		
Calibration		Auto	Auto		Auto zero cal *2	
Display	Liquid crystal display, digital readout					
Power Source	Dry battery, LR14 or C size x 6 pcs or AC adapter (option)					
Sensor Cable	Standard: 2m, Optional: 10m					
Dimensions	Main unit (indicator) 250(w) X 160(h) X 95(d) mm (approx.)					
Weight	Main unit (indicator): 2.2 kgs, Sensor: 1.3 kgs (approx.)					

*1: Converted from conductivity value.

*2: Turbidity: manual span calibration available.

Spares & Consumables

- Glass electrode cartridge (HGS-300).
- Reference electrode cartridge (HS-20B).
- DO electrode cartridge (OE-20B).
- Inner Gel for pH reference electrode.
- pH standard solution pH 6.86, 500ml.
- pH standard solution pH 4.01, 500ml.
- Buffer powder pH 6.86 box of 10 bags.
- Buffer powder pH 4.01 box of 10 bags.
- Electrolyte for DO R-5C, 50 ml.
- Cartridge membrane for DO, OCT-5020 (3 pcs).

Options

- Analog output (factory configured option): 0~1 VDC. Temperature plus one of the following: pH, DO, Conductivity, Turbidity.
- Submersible stirrer Model WQ22A-STR.
- AC Adapter (115 or 230 V models available).
- Sensor with 10m~30m cable (maximum allowable water depth: 10m).

Standard Accessories

Description	Quantity
Solid type sensor WMS22A	1 piece
pH 6.86 buffer solution, 100ml	1 bottle
pH 4.01 buffer solution 100ml	1 bottle
DO Electrolyte R-5C	1 bottle
DO Cartridge membrane	3 pieces
Spanner	1 piece
Dry battery LR-14	6 pieces
Beaker for pH	2 pieces
Shoulder belt	1 piece
Instruction manual	1 copy

Specifications are for a typical system and are subject to change without notice.

International Headquarters

DKK-TOA Corporation
29-10, 1 Chome, Takadanobaba,
Shinjuku-ku, Tokyo, 169-8648, Japan.

Tel: +81-(0)3-3202-0225
Fax: +81-(0)3-3202-5685
Email: kazutoy@dkktoa.com

European Branch Office

DKK-TOA Corporation
St. John's Innovation Centre, Cowley Road,
Cambridge CB4 0WS, United Kingdom.

Tel: +44-(0)1223-526471
Tel: +44-(0)1223-709239
Email: sales@dkktoa.co.uk