

HANDHELD ION/pH METER

Model: IM-22P

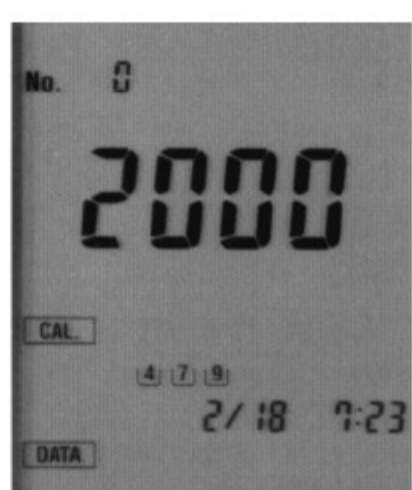
These instruments form part of the P20 series family of hand-held, waterproof meters.

FEATURES

- Waterproof construction (IP67)**
Can be used outside in all weather conditions, no need to worry if the meter is dropped into rivers, lakes or seas. Sensor can be immersed to a depth of 10m (excluding certain special sensors).
- Full validation supporting functions**
Supports ISO-14000/9001.
- Built-in clock function**
Time and measured value are constantly displayed allowing real-time observation. Data storage enables recalling of measurement times. Easy confirmation of previous calibration time.
- Data storage function built into sensor itself**
The sensor itself can store information including type, lot no. and calibration data. This information can be printed out when connected to an optional printer.
- Calibration data display**
The latest calibration data and results can be displayed. In addition, data from previous calibration history is available from the built-in memory sensor "Calibration Memo". These features provide smooth operation and instrument management.
- Calibration error display**
The sensor condition is



Time is always displayed.



OPTIONS

For smooth field measurement, indoor measurement and/or data processing needs.

- External printer EPS-G**
Uses normal paper suitable for long-term storage. 60mm effective chart.
- Data acquisition software G-LOG2**
This enables the data to be downloaded in CSV format into a PC, enabling data management using third party software such as spreadsheets, databases etc..
- RS-232C cable 2m long**
D-sub9P type connector at PC side.
- AC adapter OAA00001**
- Electrode stand OIF00001**
- Electrode holder OIB00001**
- Electrode attachment tip OIB00007**
- Stick holder OIB00009**
Sensor with 5m or more lead wire is required.
- Twin stick holder OIB00010**
Enables use of two electrodes.
- Anchor OIC00001**
For waterproof type pH, ORP, DO sensor or conductivity cell.
- DC drive stirrer ST-15**
For DO-21P or IM-22P.
- Carrying case ODA00001**
Meter, sensor etc... are encased in this case.
- Soft case SC-10P**
The meter with sensor connected is encased.
- Analog output cable**
For connecting to recorder.
- pH checker PC-1G**
- Temp. check plus TC-1G**

STANDARD SOLUTION & ION STRENGTH ADJUSTER

	Inner chamber's solution		Outer chamber's solution		Standard solution	Ionic strength adjuster					
	100mL	50mLx3	100mL	50mLx3		500mL	500ml	50mLx3			
Sodium ion	KCL-100C	OBG00001	RE-2	OBG00003	NA-1000	ISA-NA	OBA00003				
Chloride ion					CL-1000		ISA-CL	OBA00004			
Bromide ion					BR-1000						
Iodide ion			KCL-100C	OBG00001	I-1000	ISA-CN	OBA00005				
Cyanide ion			RE-2	OBG00003	CN-100						
Cadmium ion					CD-100			ISA-CU	OBA00007		
Copper ion					CU-100						
Silver ion			KCL-100C	OBG00001	KCL-100C	OBG00001	*1	ISA-CL	---		
Sulphur ion							*1	---			
Fluoride ion							KCL-100C	OBG00001	F-1000	TISAB-01 *2	OBA00001
Potassium ion							RE-2	OBG00003		TISAB-11 *3	OBA00002
Calcium ion			RE-3	OBG00004	RE-3	OBG00004	K-1000	ISA-K	OBA00010		
Nitrate ion			KCL-100C	OBG00001	KCL-100C	OBG00001	CA-1000	ISA-CA	OBA00009		
Nitrate nitrogen			RE-3	OBG00004	RE-3	OBG00004	NO ₃ -1000	ISA-NO	OBA00008		
Ammonium ion	inner solution	OBG00005			NH ₄ -1000	ISA-NH	OBA00006				
Ammonium-nitrogen					NH ₄ -N						
Carbon dioxide	Inner solution	OBG00006			CGS-111 (Powder: 10 bags, bag for 1L)	ISA-CO	OBA00011				

- Notes:
- Standard solution: For 2-point calibration use undiluted and 10 or 100 times diluted ones.
 - Standard solutions for silver and sulfur ions are easily changed in conc. and are not available. *1
 - Ionic strength adjuster: TISAB-01 for general use, but TISAB-11 for sample containing coexisting materials of aluminum or iron. *2,3
 - Outer chamber's solution: Select suitable one according to the sample. KCL-100C (Sat. KCL), RE-2 (10% potassium nitrate KNO₃) or RE-3 (10% lithium acetate CH₃COOLi).



SPECIFICATIONS

- Measuring Method** : glass & ion electrode
- Measuring Range** : pH0.00~14.00, ORP: 0~±1999mV, 0.1µg/L~999g/L
- Repeatability** : pH: ±0.02pH, ORP: ±2mV, Ion: ±1% rdg. ±1 digit
- Temperature** : pH/ORP: 0~99.9°C, Ion: 0~45.0°C
- Temperature Compensation**
pH : auto/manual
ORP/ion : Nil
- Calibration**
pH/ion : up to 3 points
- Data Storage** : 200 data x 2
- Temperature Calibration** : 1 point calibration
- 2ch Display** : provided (1ch only available)
- Auto Hold Function** : provided
- Interval Function** : provided (5 secs.~99min.59secs.)
- Clock Function** : provided
- Power Source** : AA size dry battery x 2pcs.
- RS-232C Output** : provided
- Analogue Output** : provided
- Water Proof** : IP67
- Ambient Temperature** : 0~40°C
- Dimensions** : Approx. 187.5(w) x 37.5(h) x 75(w) mm
- Weight** : Approx. 320g

STANDARD ACCESSORIES

- pH electrode GST-2729C (lead length 1m) : 1 ea.
- pH standard solution, 100ml, pH4.01 : 1 ea.
- pH standard solution, 100ml, pH6.86 : 1 ea.
- 3.3mol/L KCL solution, 50ml : 1 ea.
- AA size dry battery : 2 ea.

Selective ion electrodes and ORP electrode are separately sold.

OPTIONS

- Sodium, chloride, bromide, iodide, cyanide, copper, silver, sulphur, fluoride, potassium, calcium, nitrate, ammonium, carbon dioxide electrodes
- ORP electrode PST-2729C
- External printer
- AC adapter

DKK-TOA CORPORATION



Do not operate products before consulting instruction manual.

International Operations:
DKK-TOA Corporation
29-10, 1-Chome, Takadanobaba, Shinjuku-ku, Tokyo 169-8648 Japan
Tel: +81-3-3202-0225 Fax: +81-3-3202-5685

Representative Office (Europe):
DKK-TOA European Representative
St. Johns Innovation Centre, Cowley Rd., Cambridge CB4 0WS UK.
Tel: +44 (0)1223-526471 Fax: +44 (0)1223-709239

<http://www.toadkk.co.jp>

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