



Benchtop pH/Water Quality Analyzer

LAQUA

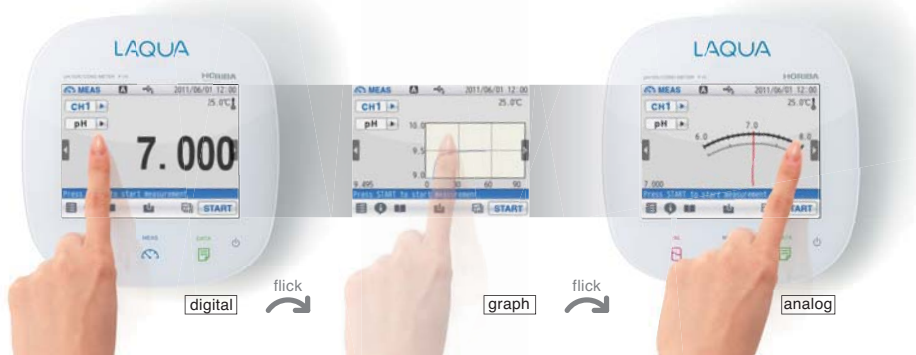
F-70/DS-70 Series

Intuitive and very easy-to-use touch panel operation

- pH**
- mV(ORP)**
- ION**
- Conductivity**
- Resistivity**
- Salinity**
- TDS**



Simply slide your finger across the screen to switch displays



Two channels can be displayed simultaneously



Color LCD touch panel display

NAVI 2CH USB
PC PRT ID
USP/EP/JP

F-74
CH.1 pH ORP ION
CH.2 COND RESI SAL TDS

NAVI 2CH USB
PC PRT ID
USP/EP/JP

F-73
CH.1 pH ORP ION
CH.2 pH ORP ION

NAVI 2CH USB
PC PRT ID
USP/EP/JP

F-72
CH.1 pH ORP ION

NAVI USB PC PRT
ID USP/EP/JP

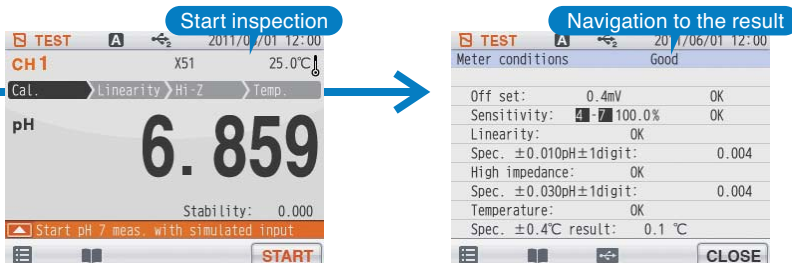
DS-72
COND RESI SAL TDS

*Accessories included : Electrode stand/Instruction manual/Quick manual/AC adapter/Cover (F-72/F-73/F-74/DS-72 only)

Full support for on-screen setting confirmation, maintenance information and troubleshooting tips guide you through trouble-free operation

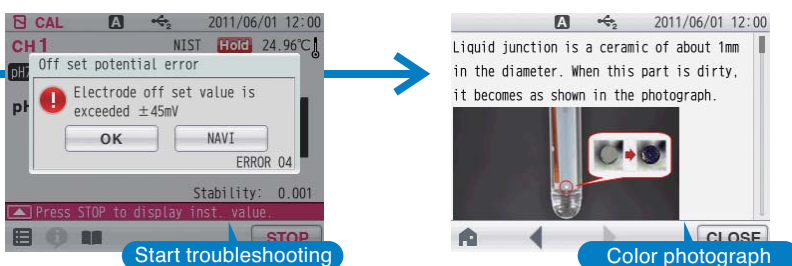
Inspection Navigation

Easy navigation for main unit and electrode inspections. Various industrial standards (JIS, USP, EP, JP, CP) are also supported.



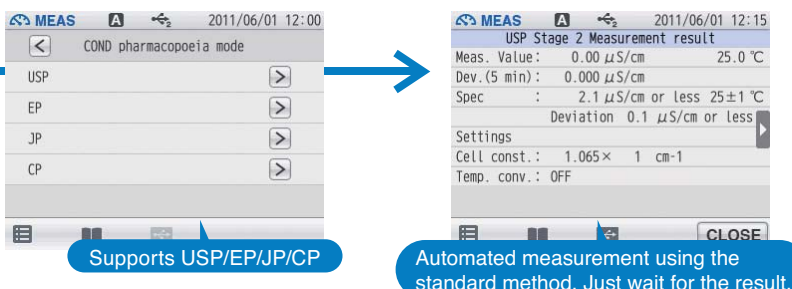
Troubleshooting Navigation

Reliable on-screen support if a problem occurs during calibration or measurement. The software has a user guide to resolve any operation difficulties.



Application Functions

Various industry standard methods are supported from measurement to result output. Conductivity measurements for pharmaceutical pure water guidelines of various countries are also supported.



Free Arm Electrode Stand

The free arm of the stand-alone electrode stand can be positioned in any direction, vertically or horizontally. The long-type electrode stand* with a telescopic stand is also provided for measurements with large beakers.

*Optional



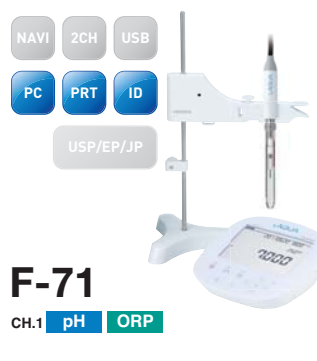
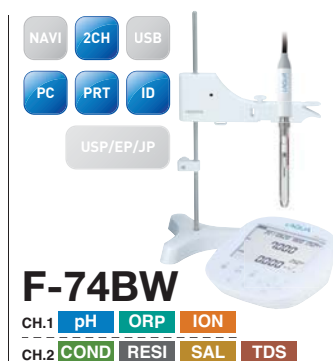
450~650mm

The long electrode stand* has a maximum length of 650 mm, it can also be stored neatly thanks to the telescopic shaft.
*Optional

Full-Range Functions for Validation and Usability

- Periodic inspection mode: JIS/Pharmacopoeias/Digital Simulator (F-72/F-73/F-74)
- Full support for pharmaceutical pure water guidelines of various countries. (USP/EP/JP/CP) (F-74/DS-72)
- Customizable auto-hold function for calibration and measurement (F-72/F-73/F-74/DS-72)
- Simultaneous connection to a GLP/GMP compatible printer and PC
- Digital memory: Up to 2,000 sets of measurement data can be recorded (F-71/F-74BW/DS-71:999)
- USB-PC communication *(all models) and USB memory (F-72/F-73/F-74/DS-72)
- Multi-language support (Japanese, English, Chinese, Korean) (F-72/F-73/F-74/DS-72)
- FDA21CFR Part 11 (please ask for a quotation)

Custom LCD display



LAQUA F-70/DS-70 series specifications

	F-71	F-72	F-73	F-74	F-74BW	DS-71	DS-72	
Measurement method	Glass electrode method						—	—
Measurement range	pH 0.000~14.000						—	—
Display range	pH -2.000~19.999	pH -2.000~20.000			pH -2.000~19.999		—	—
Resolution	0.001 pH	0.01/0.001 pH			0.001 pH		—	—
Auto range select	—	●	●	●	—	—	—	
Repeatability	±0.005 pH±1 digit	±0.001 pH±1 digit			±0.005 pH±1 digit		—	—
pH calibration point	5	5			5		—	—
Repeatability check	●	●	●	●	●	—	—	
Alarm limit of calibration	●	●	●	●	●	—	—	
Periodical check	—	●	●	●	—	—	—	
Measurement range	±1999.9 mV						—	—
Resolution	0.1 mV						—	—
Repeatability	±0.1 mV±1 digit						—	—
Measurement range	0.0~100.0°C (-30.0~130.0°C)						—	—
Resolution	0.1°C						—	—
Repeatability	±0.1°C±1 digit						—	—
Measurement method	—	Ion electrode method				—	—	
Measurement range	—	0.00 µg/L~999 g/L (mol/L)				—	—	
Resolution	—	Valid numbers 3 digits				—	—	
Repeatability	—	±0.5%F.S.±1 digit				—	—	
Periodical check	—	●	●	●	—	—	—	
Calibration curve point	—	5	5	5	5	—	—	
Addition method measurement	—	●	●	●	—	—	—	
Measurement method	—	—	—	2 AC bipolar method				
Measurement range (Display range)	—	—	—	Cell constant 100 m ⁻¹ : 0.000 mS/m~19.99 S/m Cell constant 10 m ⁻¹ : 0.0 µS/m~1.999 S/m Cell constant 1000 m ⁻¹ : 0.00 mS/m~199.9 S/m				
Resolution	—	—	—	0.05% of full scale				
Repeatability	—	—	—	±0.5%F.S.±1 digit				
Change unit	—	—	—	●	●	●	●	
Distilled water temperature conversion	—	—	—	●	●	●	●	
Periodical check	—	—	—	●	—	—	●	
JP/EP/USP/CP Pharmaceutical water application	—	—	—	●	—	—	●	
Measurement method	—	—	—	Conversion from conductivity value				
Measurement range (Display range)	—	—	—	0.00~80.00 PPT (0.000%~8.000%)				
Resolution	—	—	—	0.01 PPT (0.001%)				
Salt concentration calibration	—	—	—	●	●	●	●	
Measurement method	—	—	—	Conversion from conductivity value				
Measurement range (Display range)	—	—	—	Cell constant 100 m ⁻¹ : 0.00 Ω·m~199.9 kΩ·m Cell constant 10 m ⁻¹ : 0.0 Ω·m~1.999 MΩ·m Cell constant 1000 m ⁻¹ : 0.000 Ω·m~19.99 kΩ·m				
Resolution	—	—	—	0.05% F.S.				
Repeatability	—	—	—	±0.5%F.S.±1 digit				
Measurement method	—	—	—	Conversion from conductivity value				
Measurement range (Display range)	—	—	—	0.01 mg/L~1000 g/L	0.01 mg/L~100 g/L	0.01 mg/L~1000 g/L		
Resolution	—	—	—	0.01 mg/L				
Input (number of channels)	1	1	2	2	2	1	1	
USB peripherals (Communication with PC) ¹	●	●	●	●	●	●	●	
USB host (USB memory)	—	●	●	●	—	—	●	
RS-232C (Printer/PC)	●	●	●	●	●	●	●	
Analog out put	—	●	●	●	—	—	●	
Memory number	999	2000	2000	2000	999	999	2000	
Interval memory	●	●	●	●	●	●	●	
ID input	●	●	●	●	●	●	●	
Data search	—	●	●	●	—	—	●	
Display	Custom LCD	Color graphic LCD with capacitive Touch Panel			Custom LCD		Color graphic LCD with capacitive Touch Panel	
Dual component display	—	—	●	●	●	—	—	
Multilanguage display	—	Japanese/English/Chinese/Korean			—	—	Japanese/English/Chinese/Korean	
Navigation function	—	●	●	●	—	—	●	
User guide	—	●	●	●	—	—	●	
Graph display	—	●	●	●	—	—	●	
Printer connectivity (GLP/GMP)	●	●	●	●	●	●	●	
Custom printing function	—	●	●	●	—	—	●	
Temperature compensation (Auto/manual)	●	●	●	●	●	●	●	
AutoHold function	●	●	●	●	●	●	●	
AutoHold setting	—	●	●	●	—	—	●	
Stability function (pH/ION)	—	●	●	●	—	—	●	
Register operator	—	●	●	●	—	—	●	
Security (password)	●	●	●	●	●	●	●	
Version up function	●	●	●	●	●	●	●	
Ambient temperature	0~45°C							
Power	AC adaptor 100 ~ 240 V 50/60 Hz							
Dimensions	170 (W)×174 (D)×73 (H)mm (Excluding electrode stand and AC adaptor)							
Power consumption	Approx. 0.7 VA	Approx. 9.8 VA			Approx. 0.7 VA		Approx. 9.8 VA	
Mass of main unit	Approx. 500 g	Approx. 700 g			Approx. 500 g		Approx. 700 g	

¹ USB cable sold separately. Software can be downloaded by web registration.