

WATER ANALYSIS PORTABLE SYSTEM



Portable Spectrophotometer - LPS 100

FEATURES :

- Powerful functions.
- Meets various requirements.
- Compact and user friendly.
- Special design for field measurements.
- Real time testing.
- Unique Touch Screen.
- Optics : Flat field holographic concave grating high diffractions efficiency & wide spectral range.
- Photo Diode Array (PDA) Detector :
 - Multichannel simultaneous scanning rapid measurement, full range spectrum scanning within 0.005 secs.
- Fiber Optic Probe :
 - Anti-corrosive fiber optics probe can be directly put into the sample, full range spectrum scanning within 0.005 secs.



SPECIFICATIONS

Light Source	Convergence tungsten lamp: the service life is over 5000 hours External high source transmission deuterium lamp; both Deuterium lamp & the tungsten can be independently controlled
Measurement Mode	Dedicated modules for water quality measurement, spectrum scanning, peak picking, quantitative determination, kinetics, photometric measurement
Measuring Part	Immersed fiber optic probe. 10mm path length
Power Supply	Built in rechargeable battery provide power for all day work (car power supply optional) Charger
Operation System	Embedded system, integrated memorizer 2M-flash with timing function
Input/display	320 x 240 dots touch display screen, with backlight
Wavelength range	380nm - 800nm
Data resolution	0.6nm
Spectral band width	4 ± 1nm
Wavelength accuracy	<1.0nm
Wavelength reproducibility	0.1nm
Baseline flatness	± 0.005Abs
Noise	± 0.003Abs
Integration time	0.005s - 25s
Scanning speed	>4200nm/s
Measurement accuracy	± 2%
Dimensions	215 x 185 x 70mm
Environment temperature	Operation environment 0-40°C Preservation environment 0-50°C

ORDERING INFORMATION

Model	Qty.	Catalog No.
Portable spectrophotometer	1	31740501

ACCESSORIES

Item	Qty.	Catalog No.
Cleaning bottle	1	31740551
Car adaptor	1	31740552
Charger	1	31740553
PC-RS232 interface cable	1	31740554
Pen	1	31740555
Touch pen	1	31740556
Immersed fiber optics probe	1	31740557
Holder	1	31740558
Tweezers	1	31740559
Beaker	1	31740561
Waste paper	1	31740562
Filter paper	1	31740563
Waste bottle	1	31740564
Gloves	1pair	31740565
Cross screwdriver	1	31740566
Main unit case	1	31740567

COD_{Cr} Dedicated Testing Case - LCDC

COD_{Cr} testing case is specially designed for testing COD_{Cr} with the instrument. It contains temperature heater, test tube, pipette, and COD tubes.

Catalog No. 31740568

Item	Quantity
Test tube	1
Constant temperature heater	1
Tips	4
COD tubes (empty)	50
Paper box	1
Pipette	1
Case	1



COD_{Cr} Solutions

Item	COD _{Cr}		
Complete set	Main unit	COD _{Cr} testing case	Reagents : COD _{Cr} (high conc.) digestion solution 50pcs/box
			COD _{Cr} (low conc.) digestion solution 50pcs/box
Method	COD _{Cr} testing procedures		

Water Quality Reagent Case - LWQC

Water quality reagent case is especially designed for testing Ammonia Nitrogen, Chromium^{VI} and cyanide water with the instrument. It contains pipette, tubes holder, Colorimetric tubes, thermometer, cyanide reagent, ammonia nitrogen reagent, chromium^{VI} reagent, pH reagent etc.

Catalog No. 31740569

Item	Quantity	Item	Quantity
Pipette	1	15 holes test tube holders	1
Cyanide testing reagent No.1	1	Waste bottle	1
Cyanide testing reagent No.2	1	Beaker	1
Cyanide testing reagent No.3	1	Colorimetric tube	8
Chloramines-CAT	6	Thermometer	1
Ammonia nitrogen testing reagent No.1	1	Pipette (2ml)	1
Ammonia nitrogen testing reagent No.2	1	Pipette (10ml)	1
Chromium ^{VI} reagent No.1	1	Ear syringe	1
Chromium ^{VI} reagent No.2	1	pH paper	1
Waste bottle of Chromium ^{VI} / Ammonia nitrogen / Cyanide	3	Graduated flask (100ml)	1
Centrifuge tubes (4 tips, and 2 burettes)	6	Tips	4
pH reagent No.1	1	Burette	2
pH reagent No.2	1	Case	1



Water Quality Measurement Solutions

Item	Ammonia nitrogen determination; Chromium ^{VI} determination, Cyanide determination			
Complete Set	Main unit	Water quality reagent case	Preprocessing case for water sample	Reagents
				Ammonia nitrogen reagent package 50cs/box Chromium ^{VI} reagent package reagent 50pcs/box Cyanide reagent package 50pcs/box
Method	(Ammonia Nitrogen testing procedures) (Chromium ^{VI} testing procedures) (Cyanide testing procedures)			

Sea Water Testing Case - LSWC

Sea water testing case contain needle filter, COD testing reagent, ammonia nitrogen testing reagent, nitrite testing reagent, inorganic phosphor testing reagent etc. It can also be used with constant temperature heater, centrifuge rectifying device, and circulator.

Catalog No. 31740571



Item	Quantity	Item	Quantity
COD _{mn} testing reagent No.1	1	Inorganic nitrogen waste bottle	1
COD _{mn} testing reagent No.2	1	Inorganic phosphor waste bottle	1
Ammonia nitrogen testing reagent No.1	1	COD _{mn} waste bottle	1
Ammonia nitrogen testing reagent No.2	1	Beaker (200ml)	2
Ammonia nitrogen testing reagent No.3	1	Cd column joint	1
Ammonia nitrogen testing reagent No.4	1	Cd reductant column	1
Ammonia nitrogen testing reagent No.5	2	Brown flask (100ml)	1
Ammonia nitrogen testing reagent No.6	1	Injector (50ml)	1
Nitrite - testing reagent No.1	1	Tips box	1
Nitrite - testing reagent No.2	1	Filter membrane (φ 35)	1
Nitrate testing reagent No.1	4	Clamp	1
Nitrate testing reagent No.2	1	Filter paper	1
Nitrate testing reagent No.3	1	(pH-5.5 - 9.0)	1
Nitrate testing reagent No.4	1	Needle filter (φ 35)	1
Nitrate testing reagent No.5	1	Test tube centrifuge tube	4
Inorganic phosphor testing reagent No.1	1	Tips	4
Inorganic phosphor testing reagent No.2	1	Case	1

SEA WATER TESTING SOLUTIONS

Item	COD _{mn} testing, NO ₂ -testing, nitrate testing, Inorganic phosphor testing, Ammonia nitrogen testing		
Complete set	Main unit	Sea water testing case	Reagent
			COD _{mn} reagent 50pcs/pack Nitrite reagent 50pcs/pack Nitrate reagent 50pcs/pack Inorganic phosphor 50pcs/pack Ammonia reagent 50pcs/pack
Method	Sea water COD testing procedure, sea water nitrite testing procedure, sea water nitrate testing procedure, sea water inorganic phosphor testing procedures, sea water NH ₃ testing procedure.		

Pre-Processing Case - LPPC

The preprocessing undertakes sample distillation, filtering etc. It contains in-built heating cover, distillation device, spares, filler, flask cyanide processing reagent, water quality processing reagent and ammonia nitrogen preprocessing reagent.



Catalog No. 31740572

Item	Quantity	Item	Quantity
Centrifuge tubes (2 tips)	3	Adapter bonnet	1
Cyanide distillation testing reagent No.1	2 vases	Qualitative filter paper	1
Cyanide distillation testing reagent No.2	1vases	Condensation tube pending	1
Cyanide distillation testing reagent No.3	1vases	Graduate	1
Cyanide distillation testing reagent No.4	1vases	Filter	1
Water processing reagent	1vases	Tap joint	1
Beaker	1	Fastening clamp	2
Ammonia nitrogen distillation preprocessing reagent No.1	1vases (50g)	Zeolite	1
Ammonia nitrogen distillation preprocessing reagent No.1	1vases (50g)	Reagent bottle	4 (empty)
Bracket	2	Latex tube	4 Meter
Glass rod	1	Case	1
Heating cover	1		
Flask (100ml)	1		

Optional Accessories

Multiple accessories, water quality testing case, preprocessing case, COD testing case, Sea water testing case, calculator.



Various fiber optics accessories for transmittance, reflectance, fluorescence, etc; also provide solution for water quality measurement.



SMA905 standard inter face is available

Catalog No. 31740574



Website update is possible



Distillation Device

The special design can be used with our circulator, user friendly operation.

Catalog No. 31740575



Heating Covers

it is used for distillation it can undertake the temperature as high as 450°C. A adjustment knob is used to control Heating temperature and distillation speed.

Catalog No. 31740578

Constant Temperature Heater

It can heat several tubes at the same time, the stable and accurate heater can adjust the temperature in a wide range.

Catalog No. 31740576



Centrifuge

Separates the solid and liquid. It is of small size and has low noise, with built in timer.

Catalog No. 31740579



Cooling Water Circulator

Cooling water circulator is used with distillation device.

Catalog No. 31740577



Syringe

It is used to remove the required quantity of sample solution. There is an anti-corrosive filter on the tip.

Catalog No. 31740581

