



# SMART Spectro<sup>®</sup> 2 Spectrophotometer

An Affordable, Pre-Programmed Spectrophotometer with Automatic Wavelength Selection and an optional Bluetooth Printer

**NEW!**



Optional Bluetooth<sup>®</sup> Printer Available!

Instrumentation for the Lab & Field!

# SMART Spectro<sup>®</sup> 2 Spectrophotometer

A spectrophotometer that is easy to use and more accurate than anything in its price range. With automatic wavelength selection, pre-programmed tests, and superior performance—this is the best spectrophotometer for the money!

## Menu Driven Display

Tests and functions are selected from scrolling menus for ultimate simplicity. Results are displayed as %T, absorbance, and concentration.

## Pre-Programmed Tests, User Tests & Automatic Wavelength Selection

Over 80 pre-programmed tests. Up to 25 calibrations for additional tests can be entered into the memory. The user can also customize sequences for frequently run tests. The meter automatically moves the grating to the required wavelength.

## To Order:

### Order Code 2000-02 [120V/60Hz and 220V/50Hz]

Includes 6 sample cells [25mm round], 2 sample cell holders [25mm round and COD, 10mm cuvettes], power cable, and diagrammed manual.

### Options:

- Carrying Case, Code 2000-CS
- Battery Pack [rechargeable], Code 2000-BP
- Battery Charger, Code 2000-BC
- Replacement sample cells [round], Code 0290-6
- Cuvettes, Code 29653-10
- Bluetooth<sup>®</sup> Mobile Printer, Code 5-0066
- Accessory Packs: Code 1961 [syringe, UDV blanks and storage bag] or Code 1962 [pipettor, UDV blanks, storage bad and rack]



Order Code 2000-02  
[120V/60Hz and 220V/50Hz]

**2** YEAR  
WARRANTY

Wavelength Range:	350-1000 nm
Wavelength Accuracy:	±2 nm
Wavelength Resolution:	1 nm
Wavelength Bandwidth:	4 nm [max]
Photometric Range:	0-125%T, -0.3-2.500A
Photometric Accuracy:	±0.005A
Photometric Noise:	<0.001A at 0A; <0.002A at 2A
Photometric Drift:	±0.002A/hr @500 nm
Photometric Stray Light:	≤0.4 %T @360 nm
Dispersive Device:	Grating - based system
Optical Mount:	Modified Ebert
Grating:	1200 grooves/mm ruled grating
Display:	5.1 inches diagonal
Interface:	USB, Bluetooth <sup>®</sup> [mobile printer only Code 5-0066]
Light Source:	Quartz halogen
Bulb Life:	1000 hours minimum
Sample Chambers:	25 mm round cell, 10 mm square cuvette UDV, COD
Detector:	Silicon photodiode
Temperature Range:	0-40°C
Modes:	Conc., %T, ABS
Pre-Programmed Tests:	Yes
Wavelength Selection:	Automatic
User Tests:	Up to 25 can be entered and edited
Datalogging:	USB, datalogs 500 tests
Diagnostics:	Yes
Power:	110/220 volt or battery pack [rechargeable]
Weight:	4.65 kgs [10.3 lbs]
Size [WxDxH]:	35 x 28 x 17 cm

# SMART Spectro® 2 Reagent Systems

Test Factor	Test Method [# of reagents]	Range	# of Tests	Order Code	Ship Code
Alkalinity UDV	Unit Dose Vial [1]	15-200	100	4318-J	NH
Aluminum	Eriochrome Cyanine R [4]	0.01-0.30	50	3641-01-SC	NH
Ammonia Nitrogen LR, Fresh	Salicylate [3]	0.02-1.00	25	3659-01-SC	R2
Ammonia Nitrogen LR, Salt	Salicylate [3]	0.10-1.00	25	3659-01-SC	R2
Ammonia Nitrogen HR	Nesslerization [2]	0.05-4.00	50	3642-SC	R1
Biguanide	Colorimetric [1]	5-70	50	4044	NH
Boron	Azomethine-H [2]	0.05-0.80	50	4868-01	NH
Bromine - DPD Tablet	DPD Tablets [3]	0.04-9.00	100	3643-SC	NH
Bromine UDV†	Unit Dose Vial DPD [1]	0.3-22.0	100	4311-J	NH
Cadmium	PAN [4]	0.02-1.00	50	4017-01	R1
Carbohydrazide	Iron Reduction [3]	0.005-0.900	100	4857	R1
Chloride TesTab	Argentometric [1]	0.5-30.0	50	3693-SC	NH
Chlorine [Free & Total] - DPD Tablet	DPD Tablets [3]	0.02-4.00	100	3643-SC	NH
Chlorine - Free UDV†	Unit Dose Vial [1]	0.10-10.00	100	4311-J	NH
Chlorine - Liquid DPD	DPD [3]	0.30-4.00	144	4859	R1
Chlorine - Total UDV†	Unit Dose Vial [1]	0.1-10.0	100	4312-J	NH
Chlorine Dioxide	DPD Tablet/Glycine [2]	0.04-7.00	100	3644-SC	NH
Chromium Hexavalent	Diphenylcarbohydrazide [1]	0.01-1.00	50	3645-SC	HA
Chromium [Total, Hex & Trivalent]	Diphenylcarbohydrazide [5]	0.03-1.00	50	3698-SC	HF
Chromium TesTab	Diphenylcarbohydrazide [1]	0.00-1.00	50	3697-SC	
Cobalt	PAN [3]	0.02-2.00	50	4851-01	LQ
COD LR w/ Mercury*	Digestion [1]	5-150 mg/L	25	0075-SC	R1
COD LR w/o Mercury*	Digestion [1]	5-150 mg/L	25	0072-SC	R1
COD SR w/ Mercury*	Digestion [1]	50-1,500 mg/L	25	0076-SC	R1
COD SR w/o Mercury*	Digestion [1]	500-1,500 mg/L	25	0073-SC	R1
COD HR w/ Mercury*	Digestion [1]	500-15,000 mg/L	25	0077-SC	R1
COD HR w/o Mercury*	Digestion [1]	50-15,000 mg/L	25	0074-SC	R1
Color	Platinum Cobalt [0]	15-1,000	∞	NA	NH
Copper, BCA	Bicinchoninic Acid [1]	0.05-3.50	50	3640-SC	NH
Copper, Cuprizone	Cuprizone [2]	0.01-2.00	50	4023	R1
Copper, DDC	Diethyldithiocarbamate [1]	0.05-6.00	50	3646-SC	NH
Copper UDV†	Unit Dose Vial, Bicinchoninic Acid [1]	0.20-4.00	100	4314-J	NH
Cyanide	Pyridine-Barbituric Acid [5]	0.05-0.50	50	3660-01-SC	R1
Cyanuric Acid	Melamine [1]	16-200	100	3661-01-SC	R1
Cyanuric Acid UDV†	Unit Dose Vial, Melamine [1]	5-150	100	4313-J	NH
DEHA	Iron Reduction [3]	0.005-0.700	100	4857	NH
Dissolved Oxygen [DO]	Winkler Colorimetric [3]	0.3-12.0	100	3688-SC	R1
Erythorbic Acid	Iron Reduction [3]	0.02-3.00	100	4857	R1
Fluoride	SPADNS [2]	0.1-2.0	50	3647-02-SC	R1
Hardness [Total] UDV†	UDV [1]	10-500	100	4309-J	NH
Hydrazine	P-dimethylaminobenzaldehyde [2]	0.010-0.750	50	3656-01-SC	R2
Hydrogen Peroxide LR	DPD [2]	0.02-1.50	100	3662-SC	NH
Hydrogen Peroxide HR	DPD [2]	1-60	100	4045-01	NH
Hydrogen Peroxide Shock	DPD [2]	4-225	100	4045-01	NH
Hydroquinone	Iron Reduction [3]	0.01-1.80	100	4857	R1
Iodine	DPD Tablets [2]	0.08-14.00	100	3643-SC	NH
Iron	Bipyridyl [2]	0.06-6.00	50	3648-SC	R1
Iron UDV†	Unit Dose Vial, Bipyridyl [1]	0.07-10.00	100	4315-J	NH

†As ppm except as otherwise indicated.

\*Requires COD Adapter Chamber Code 5-0087 [included] \*\*Requires UDV Adapter Code 5-0086 [included] and Accessory Package Code 1961 or Code 1962 [sold separately]

Ship Codes: NH - Non Hazardous, No Fees; HF - Hazardous Materials, Air & Ground Fees; R1 - Small Quantity Hazardous Materials, No Fees; R2, R3, & LQ - Hazardous Materials, Air Fees Only

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Test Factor	Test Method [# of reagents]	Range	# of Tests	Order Code	Ship Code
Iron, Phenanthroline	1,10 Phenanthroline [2]	0.04-4.50	50	3668-SC	R1
Lead	PAR [5]	0.1-5.0	50	4031-01	R1
Manganese LR	PAN [3]	0.02-0.70	50	3658-01-SC	HF
Manganese HR	Periodate [2]	0.3-15.0	50	3669-SC	R1
Mercury	TMK [3]	0.02-1.50	50	4861-01	LQ
Methylethylketoxime	Iron Reduction [3]	0.02-3.00	100	4857	R1
Molybdenum HR	Thioglycolate [3]	0.2-15.0	50	3699-03-SC	R1
Nickel	Dimethylglyoxime [6]	0.06-8.00	50	3663-01-SC	LQ
Nitrate Nitrogen LR	Cadmium Reduction [2]	0.05-3.00	20	3649-SC	R1
Nitrate TesTabs	Zinc Reduction [1]	3-60	50	3689-SC	NH
Nitrite Nitrogen LR	Diazotization [2]	0.020-0.800	20	3650-SC	NH
Nitrogen, Total*	Chromotropic Acid/Digestion [6]	2-25 mg/L	25	4026-01	R1
Oxygen Scavengers	Iron Reduction [3]	various	100	4857	R1
Ozone LR	Indigo Trisulfonate [3]	0.02-0.40	100	3651-SC	NH
Ozone HR	Indigo Trisulfonate [3]	0.05-1.50	20	3651-SC	NH
pH, CPR	Chlorophenol Red [3]	5.0-7.0 pH	100	3700-01-SC	NH
pH, PR	Phenol Red [3]	6.8-8.4 pH	100	3700-01-SC	NH
pH, TB	Thymol Blue [3]	8.0-9.5 pH	100	3700-01-SC	NH
Phenol	Aminoantipyrine [3]	0.05-6.00	50	3652-01-SC	NH
Phosphate LR	Ascorbic Acid Reduction [2]	0.04-3.00	50	3653-SC	R2
Phosphate HR	Vanodomolybdophosphoric Acid [1]	1.0-70.0	50	3655-SC	R1
Phosphorus, Total - LR*	Ascorbic Acid/Digestion [5]	0.07-3.50 mg/L	25	4024-01	R1
Phosphorus, Total - HR*	Molybdovanadate/Digestion [5]	5.0-100.0 mg/L	25	4025-01	R1
Potassium	Tetraphenylboron [2]	0.5-10.0	100	3639-SC	R1
Silica LR	Heteropoly Blue [4]	0.03-2.50	100	3664-SC	R1
Silica HR	Silicomolybdate [3]	1-50	50	3687-SC	R1
Sulfate HR	Barium Chloride [1]	5-100	100	3665-SC	R1
Sulfide LR	Methylene Blue [3]	0.02-1.00	50	3654-02-SC	R1
Surfactants	Bromphenol Blue [3]	0.5-8.0	100	4876-01	LQ
Tannin	Tungsto-Molybdophosphoric Acid [3]	0.2-10.0	50	3666-01-SC	R1
Turbidity	Absorptimetric [0]	2-400 FTU	◊	NA	NH
Zinc LR	Zincon [6]	0.03-3.00	50	3667-01-SC	LQ

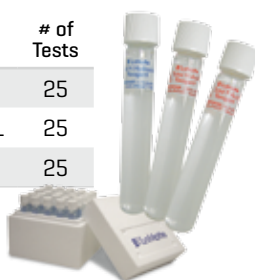
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## Digestion Tubes for Total Nitrogen and Total Phosphorus

Code	Description	Range	# of Tests
4024-01	Low Total Phosphorus	0-3.5 mg/L	25
4025-01	High Total Phosphorus	0-100 mg/L	25
4026-01	Total Nitrogen	0-25 mg/L	25



## Multi-Range COD Reagent Systems

LaMotte-manufactured, each package contains 25 ready to use vials. All kits ship as R1.

### Mercury based systems

Code	Range
0075-SC	0-150 ppm [EPA approved]
0076-SC	0-1500 ppm [EPA approved]
0077-SC	0-15,000 ppm

### Mercury-free systems

Code	Range
0072-SC	0-150 ppm
0073-SC	0-1500 ppm
0074-SC	0-15,000 ppm



## COD Heater Block Code 5-0102 [120V], 12-tube capacity • Code 5-0102-EX2 [230V], 12-tube capacity

Features digital microprocessor control, programmable time and temperature settings, and a dual LED display to monitor both temperature and timer. Perfect for COD, Total Phosphorus, and Total Nitrogen testing PLUS other tests requiring digestion.



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