

SMART3 Colorimeter



IP67
WATERPROOF

2 YEAR
WARRANTY

CE

Replaceable cup
protects optics

New Bolder
Backlit Display

Simple
6-button keypad

Code 1910

Over 80 Pre-Programmed Tests

The user-friendly SMART3 Colorimeter is the ideal direct reading colorimeter for complete on-site water analyses.

All pre-programmed tests can be run on these compact instruments and each test features automatic wavelength selection. The entire multi-LED optical system is embedded in the light chamber and optimized for LaMotte test reagent systems. The analyst can simply select the test and put in the sample with reagent. The microprocessor, which selects the wavelength, also allows the user to load up to 25 tests for analyzing custom reagent systems. LaMotte stands behind every system we provide.

These portable colorimeters have the user in mind with these advanced features:

- IP67 Waterproof
- Simple, menu-driven operation
- Alphabetical test selection
- User-selected test sequences
- Self diagnostics with error/warning messages
- Instant readiness without “count down” delays; achieved by active stabilization of lamp intensity
- Auto-blank; Auto-off
- European CE mark

The user may select any of the wavelengths in each meter to determine the absorbance or %T of a sample at the desired wavelength.

Additional advancements include:

- Superior narrow band-width interference filters
- New LCD display for improved readability
- USB interface
- Lithium ion rechargeable battery, USB computer adapter is included

As well as the incorporated features:

- All wavelength filters - 428, 525, 568, 635 nm [SMART3 only]
- USB port
- and more...

NOTE: SMART 3 Turbidity is not the same as EPA 180.1 Turbidity

SMART Colorimeter® is a registered trademark of LaMotte Company.



See pages 19-20 for complete reagent system listing.

| | |
|---------------|---------------------------------------------------------------------------------------------|
| Range: | 0-125%T |
| Resolution: | 1% FS |
| Accuracy: | 2% FS |
| CE Mark: | Yes |
| Light Source: | LED/Filter setup; 428nm, 525nm, 568nm, 638nm |
| Detector: | Photodiode |
| Display: | 160x100 Backlight LCD, 20x4 line graphics display |
| Sample Cell: | 25 mm round cell, 10 mm square cuvette, 16 mm COD tubes |
| Datalogging: | Up to 500 data points, USB transfer, time and date stamped |
| Keypad: | 6-button mechanical |
| Calibration: | Factory set - user adjustable |
| Power: | USB computer/power charger or Lithium Ion rechargeable battery, 3.7V, 2.5" x 0.75", 1.7 oz. |
| Dimensions: | 19.05 x 8.84 x 6.35 cm; 7.5 x 3.5 x 2.5 inches |
| Weight: | 15 ounces |
| Bandwidth: | 10 mm typical |

SMART3 · Code 1910

Comes with 6 sample tubes, power charger and manual

Accessories/Replacement Items:

| | |
|--------------------------------|------------------|
| Smartcheck Standards | Code 4148 |
| Replacement Sample Chamber Cup | Code 3-0038 |
| COD/UDV adapter | Code 1724 |
| 6 sample tubes | Code 0290-6 |
| USB Cable | Code 1720 |
| USB Power Plug | Code 1721 |
| Car Charger | Code 5-0132 |
| Small Case | Code 1910-GCS150 |
| Large Case | Code 1910-GCS440 |
| Bluetooth Printer | Code 5-0066 |

Instrument Reagent Listing

New tests are being developed for the SMART 3 Colorimeter. Please contact our Technical Service Department for information regarding additions.

| Test Factor | Test Method [# of reagents] | SMART 3 Range† | Spectro / UV-VIS Range† | # Tests | Code | Ship |
|-----------------------------------|----------------------------------------|-----------------|-------------------------|---------|------------|------|
| Alkalinity UDV | Unit Dose Vial [1] | 10-250 | 15-200 | 100 | 4318-J | NH |
| Aluminum | Eriochrome Cyanine R [4] | 0.01-0.30 | 0.01-0.30 | 50 | 3641-01-SC | NH |
| Ammonia Nitrogen LR, Fresh | Salicylate [3] | 0.05-1.00 | 0.02-1.00 | 25 | 3659-01-SC | R2 |
| Ammonia Nitrogen LR, Salt | Salicylate [3] | 0.10-1.00 | 0.10-1.00 | 25 | 3659-01-SC | R2 |
| Ammonia Nitrogen HR | Nesslerization [2] | 0.05-4.00 | 0.05-4.00 | 50 | 3642-SC | R1 |
| Barium | Barium Chloride [1] | 5-200 | — | 50 | 3638-SC | NH |
| Benzotriazole** | UV Photolysis [3] | 0.5-30.0 | — | 50 | 4047-01 | R1 |
| Biguanide | Colorimetric [1] | 2-70 | 5-70 | 50 | 4044 | NH |
| Borate UDV | Unit Dose Vial [1] | 5-80 | — | 100 | 4322-J | NH |
| Boron | Azomethine-H [2] | 0.05-0.80 | 0.05-0.80 | 50 | 4868-01 | NH |
| Bromine, Liquid DPD | DPD Liquids [3] | 0.10-9.00 | — | 144 | 4859 | R2 |
| Bromine | DPD Tablets [2] | 0.10-9.00 | 0.04-9.00 | 100 | 3643-SC | NH |
| Bromine UDV | Unit Dose Vial DPD [1] | 0.1-22.0 | 0.3-22.0 | 100 | 4311-J | NH |
| Cadmium | PAN [4] | 0.02-1.00 | 0.02-1.00 | 50 | 4017-01 | R1 |
| Carbohydrazide | Iron Reduction [3] | 0.04-0.900 | 0.005-0.900 | 100 | 4857 | R1 |
| Chloride TesTab | Argentometric [1] | 0.4-30.0 | 0.5-30.0 | 50 | 3693-SC | NH |
| Chlorine, Liquid DPD | DPD Liquids [3] | 0.03-4.00 | 0.30-4.00 | 144 | 4859 | R1 |
| Chlorine, Tablet DPD | DPD Tablets [3] | 0.03-4.00 | 0.02-4.00 | 100 | 3643-SC | NH |
| Chlorine, Free, UDV | Unit Dose Vial [1] | 0.10-10.00 | 0.10-10.00 | 100 | 4311-J | NH |
| Chlorine, Total, UDV | Unit Dose Vial [1] | 0.10-10.00 | 0.1-10.0 | 100 | 4312-J | NH |
| Chlorine Dioxide | DPD Tablet/Glycine [2] | 0.06-8.00 | 0.04-7.00 | 50 | 3644-SC | NH |
| Chromium Hexavalent | Diphenylcarbohydrazide [1] | 0.01-1.00 | 0.01-1.00 | 50 | 3645-SC | HA |
| Chromium [Total, Hex & Trivalent] | Diphenylcarbohydrazide [5] | 0.01-1.00 | 0.03-1.00 | 50 | 3698-SC | HF |
| Cobalt | PAN [3] | 0.04-2.00 | 0.02-2.00 | 50 | 4851-01 | LQ |
| COD LR w/ Mercury* | Digestion [1] | 5-150 mg/L | 5-150 mg/L | 25 | 0075-SC | R1 |
| COD LR w/o Mercury* | Digestion [1] | 5-150 mg/L | 5-150 mg/L | 25 | 0072-SC | R1 |
| COD SR w/ Mercury* | Digestion [1] | 50-1,500 mg/L | 50-1,500 mg/L | 25 | 0076-SC | R1 |
| COD SR w/o Mercury* | Digestion [1] | 50-1,500 mg/L | 500-1,500 mg/L | 25 | 0073-SC | R1 |
| COD HR w/ Mercury* | Digestion [1] | 500-15,000 mg/L | 500-15,000 mg/L | 25 | 0077-SC | R1 |
| COD HR w/o Mercury* | Digestion [1] | 500-15,000 mg/L | 50-15,000 mg/L | 25 | 0074-SC | R1 |
| Color | Platinum Cobalt [0] | 20-1,000 | 15-1,000 | ∞ | NA | NH |
| Copper, BCA | Bicinchoninic Acid [1] | 0.04-3.50 | 0.05-3.50 | 50 | 3640-SC | NH |
| Copper, Cuprizone | Cuprizone [2] | 0.03-2.00 | 0.01-2.00 | 50 | 4023 | R1 |
| Copper, DDC | Diethyldithiocarbamate [1] | 0.10-6.00 | 0.05-6.00 | 50 | 3646-SC | NH |
| Copper UDV | Unit Dose Vial, Bicinchoninic Acid [1] | 0.1-4.0 | 0.20-4.00 | 100 | 4314-J | NH |
| Cyanide | Pyridine-Barbituric Acid [5] | 0.03-0.35 | 0.05-0.50 | 50 | 3660-01-SC | R1 |
| Cyanuric Acid | Melamine [1] | 10-200 | 16-200 | 100 | 3661-01-SC | R1 |
| Cyanuric Acid UDV | Unit Dose Vial, Melamine [1] | 10-150 | 5-150 | 100 | 4313-J | NH |
| DEHA | Iron Reduction [3] | 0.01-0.70 | 0.005-0.700 | 100 | 4857 | NH |
| Dissolved Oxygen [DO] | Winkler Colorimetric [3] | 0.6-11.0 | 0.3-12.0 | 100 | 3688-SC | R1 |
| Erythorbic Acid | Iron Reduction [3] | 0.02-3.00 | 0.02-3.00 | 100 | 4857 | R1 |
| Fluoride | SPADNS [2] | 0.1-2.0 | 0.1-2.0 | 50 | 3647-02-SC | R1 |
| Hardness [Total] UDV | UDV [1] | 10-500 | 10-500 | 100 | 4309-J | NH |
| Hydrazine | P-dimethylaminobenzaldehyde [2] | 0.01-1.00 | 0.010-0.750 | 50 | 3656-01-SC | R2 |
| Hydrogen Peroxide LR | DPD [2] | 0.02-1.50 | 0.02-1.50 | 100 | 3662-SC | NH |

†As ppm except as otherwise indicated *Requires COD Adapter Code 5-0087 and Heater Block
 **UV lamp 31041-1; UV lamp power source 31041-2; UV safety goggles 31041

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Instrument Reagent Listing

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|-------------------------|------------------------------------|----------------|-------------------------|---------|------------|------|
| Hydrogen Peroxide HR | DPD [2] | 1-60 | 1-60 | 50 | 4045-01 | NH |
| Hydrogen Peroxide Shock | DPD [2] | 10-225 | 4-225 | 100 | 4045-01 | NH |
| Hydroquinone | Iron Reduction [3] | 0.01-2.00 | 0.01-1.80 | 100 | 4857 | R1 |
| Iodine | DPD Tablets [2] | 0.2-14.0 | 0.08-14.00 | 100 | 3643-SC | NH |
| Iron | Bipyridyl [2] | 0.10-6.00 | 0.06-6.00 | 50 | 3648-SC | R1 |
| Iron, Phenanthroline | 1,10 Phenanthroline [2] | 0.1-5.0 | 0.04-4.50 | 50 | 3668-SC | R1 |
| Iron UDV | Unit Dose Vial, Bipyridyl [1] | 0.1-10.0 | 0.07-10.00 | 100 | 4315-J | NH |
| Lead | PAR [5] | 0.1-5.0 | 0.1-5.0 | 50 | 4031-01 | |
| Manganese LR | PAN [3] | 0.01-0.70 | 0.02-0.70 | 50 | 3658-01-SC | HF |
| Manganese HR | Periodate [2] | 0.3-15.0 | 0.3-15.0 | 50 | 3669-SC | R1 |
| Mercury | TMK [3] | 0.01-1.50 | 0.02-1.50 | 50 | 4861-01 | LQ |
| Methylethylketoxime | Iron Reduction [3] | 0.01-3.00 | 0.02-3.00 | 100 | 4857 | R1 |
| Molybdenum HR | Thioglycolate [3] | 0.6-50.0 | 0.2-15.0 | 50 | 3699-03-SC | R1 |
| Nickel | Dimethylglyoxime [6] | 0.15-8.00 | 0.06-8.00 | 50 | 3663-01-SC | LQ |
| Nitrate Nitrogen LR | Cadmium Reduction [2] | 0.10-3.00 | 0.05-3.00 | 20 | 3649-SC | R1 |
| Nitrate TesTabs | Zinc Reduction [1] | 5-60 | 3-60 | 50 | 3689-SC | NH |
| Nitrate UDV | Unit Dose Vial, Zinc Reduction | 2-80 | — | 100 | 4321-J | NH |
| Nitrite Nitrogen LR | Diazotization [2] | 0.02-0.80 | 0.020-0.800 | 20 | 3650-SC | NH |
| Nitrogen, Total* | Chromotropic Acid/Digestion [6] | 3-25 mg/L | 2-25 mg/L | 25 | 4026-01 | R1 |
| Oxygen Scavengers | Iron Reduction [3] | various | various | 100 | 4857 | R1 |
| Ozone | DPD Liquid [4] | 0.03-3.00 | — | 100 | 4881 | R1 |
| Ozone LR | Indigo Trisulfonate [3] | 0.01-0.40 | 0.02-0.40 | 100 | 3651-SC | NH |
| Ozone HR | Indigo Trisulfonate [3] | 0.05-2.50 | 0.05-1.50 | 20 | 3651-SC | NH |
| pH, CPR | Chlorophenol Red [3] | 5.0-6.8 pH | 5.0-7.0 pH | 100 | 3700-01-SC | NH |
| pH, PR | Phenol Red [3] | 6.6-8.4 pH | 6.8-8.4 pH | 100 | 3700-01-SC | NH |
| pH, TB | Thymol Blue [3] | 8.0-9.5 pH | 8.0-9.5 pH | 100 | 3700-01-SC | NH |
| Phenol | Aminoantipyrine [3] | 0.05-6.00 | 0.05-6.00 | 50 | 3652-01-SC | NH |
| Phosphate LR | Ascorbic Acid Reduction [2] | 0.05-3.00 | 0.04-3.00 | 50 | 3653-SC | R2 |
| Phosphate HR | Vanadomolybdophosphoric Acid [1] | 0.5-70.0 | 1.0-70.0 | 50 | 3655-SC | R1 |
| Phosphate, ppb | Ascorbic Acid/Digestion [2] | 50-3000 ppb | — | 50 | 3653-SC | R2 |
| Phosphorus, Total - LR* | Ascorbic Acid/Digestion [5] | 0.50-3.50 mg/L | 0.07-3.50 mg/L | 25 | 4024-01 | R1 |
| Phosphorus, Total - HR* | Molybdovanadate/Digestion [5] | 5-100 mg/L | 5.0-100.0 mg/L | 25 | 4025-01 | R1 |
| Potassium | Tetraphenylboron [2] | 0.8-10.0 | 0.5-10.0 | 100 | 3639-SC | R1 |
| Silica LR | Heteropoly Blue [4] | 0.05-4.00 | 0.03-2.50 | 100 | 3664-SC | R1 |
| Silica HR | Silicomolybdate [3] | 1-75 | 1-50 | 50 | 3687-SC | R1 |
| Sulfate HR | Barium Chloride [1] | 3-100 | 5-100 | 100 | 3665-SC | R1 |
| Sulfide LR | Methylene Blue [3] | 0.06-1.50 | 0.02-1.00 | 50 | 3654-02-SC | R1 |
| Surfactants | Bromphenol Blue [3] | 0.5-8.0 | 0.5-8.0 | 100 | 4876-01 | LQ |
| Tannin | Tungsto-Molybdophosphoric Acid [3] | 0.1-10.0 | 0.2-10.0 | 50 | 3666-01-SC | R1 |
| Tolyltriazole** | UV Oxidation/Dichromate [3] | 0.5-30.0 | — | 50 | 4047-01 | R1 |
| Turbidity | Absorptimetric [0] | 3-400 FAU | 2-400 FTU | ∞ | NA | NH |
| Zinc LR | Zincon [6] | 0.05-3.00 | 0.03-3.00 | 50 | 3667-01-SC | LQ |

† As ppm except as otherwise indicated * Requires COD Adapter Code 5-0087 and Heater Block

** UV lamp 31041-1; UV lamp power source 31041-2; UV safety goggles 31041

Ship Codes: (NH) Non-Hazardous Material - No Fees · (R1) Small Qty, Hazardous Material - No Fees · (LQ, R2, R3) Hazardous Material - Air Fees Only · (HF) Hazardous Material - Air & Ground Fees