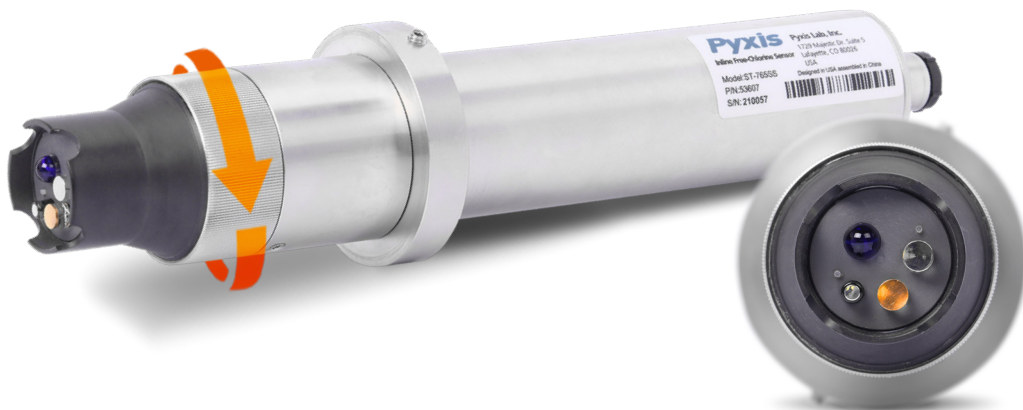




Scan the QR Code to
CONTACT US FOR MORE INFO

ST-765SS SERIES

Inline Oxidizer + pH Sensor Series for Cooling, Process & Drinking Water

DESCRIPTION

The ST-765SS Series are stainless-steel, multi-parameter, membrane-less sensors built on Pyxis' advanced bare-gold electrochemical detection platform. These sensors deliver accurate, real-time measurement of a wide range of oxidizers, including Free Chlorine (FCL), Total Chlorine (TCL), Chlorine Dioxide (ClO₂), Bromine (Br₂), Monochloramine (NCL), Ozone (O₃), Hydrogen Peroxide (H₂O₂), Peracetic Acid (PAA), and Sulfite (SO₃). In addition, select models offer dual-parameter configurations for Dechlorination (Free Chlorine + Sulfite) and TFCL (Free + Total Chlorine) monitoring—all with integrated pH and temperature compensation for maximum accuracy in real-world conditions.

Each sensor eliminates the drawbacks of membranes and liquid reagents, providing fast startup, reduced maintenance, and extended electrode life of up to 2 years. The replaceable dual-gold electrode head assembly (EH-765 Series) and flat, front-end design resist fouling, while pairing with the FR-300-PLUS automated brushing flow assembly ensures consistent performance across clean to heavily contaminated water applications.

The rugged 316 stainless steel body withstands aggressive industrial environments, while built-in 2x 4–20mA and RS-485 Modbus outputs plus Bluetooth® 5.0 (with MA-CR or PowerPACK adapters) enable flexible integration and easy field diagnostics through the uPyxis® app. The ST-765SS Series sets a new benchmark in oxidizer monitoring—field-tough, lab-precise, and comprehensive, covering the widest range of oxidizers available in a single sensor platform.

SOME COMMON APPLICATIONS

- Cooling Water
- Food, Beverage, Vegetable Process Water (NON-POULTRY)
- Wastewater Effluent
- Potable & Drinking Water
- Irrigation & Process Water
- Food & Beverage Processing Equipment Sanitization
- Spring Water Transport Disinfection
- Bottled Water Filler Production
- RO Feedwater
- Industrial Process Water
- Conveyors & Flume Water

FEATURES

- Real-Time Oxidizer(s) + pH Detection
- Dual 4-20mA & RS-485 Modbus Outputs
- Bluetooth® Enabled with the MA-CR or PowerPACK Bluetooth® Adapters for use with uPyxis®
- Integrated RTD and pH Compensation up to 9.0+ of the PAA Value
- Replaceable EH-765-Series Bare Gold Electrode Head Assembly - Simple Change & Maintenance

GENERAL SENSOR SPECIFICATONS

Item	ST-765SS SERIES
Sample Inlet Pressure	7.25–30 psi (0.05–0.2MPa)
Sensor Power Supply	22–26V DC, 2W Power Consumption
Storage Temperature	-7–60 °C (20–140 °F)
Outputs	Dual Isolated 4-20mA Outputs and Isolated RS-485 Modbus Output
Dimensions	8.3" (210.8mm) Length, 1.4" (35.6 mm) Diameter
Weight	530g (1.16lbs)
MAX Sensor Pressure	100psi (6.9Bar) Sensor Only
Operating Temperature	4–49 °C (40–120 °F)
Wet Material	UPVC/Gold/ Platinum / Glass / 316L Stainless Steel
Rating	IP67 Fully Dustproof and Waterproof
Selectivity	Non-Selective, Cross Sensitive to Other Oxidizing Species
Compliance	EPA-334.0 and ISO-7323
Regulation	CE / RoHS
Cables Included	MA-4.9CR Cable (8PIN Adapters – 1.5m) MA-1.5CR Cable (8PIN Adapter / Flying Leads – 1.5m)
Typical Electrode Service Life	2 Years
Electrode Warranty	6 Months
Sensor Warranty	13 Months

SENSOR MEASUREMENT SPECIFICATION TABLES

Item	ST-765SS-FCL	ST-765SS-TCL	ST-765SS-CLO	ST-765SS-Br
Part Number	53607	53616	53608	59643
Oxidizer Measured	Free Chlorine	Total Chlorine	Chlorine Dioxide	Bromine
Oxidizer Range	0.00–5.00ppm			
Oxidizer Precision	±0.01mg/L or 1%			
pH Range	0–14			
pH Precision	±0.01pH			
pH Compensation	Up to 9.0+			
Sensor Body Material	316L Stainless Steel			

Item	ST-765SS-NCL	ST-765SS-PAA	ST-765SS-O3	ST-765-H2O2
Part Number	53623	53610	53614	53612
Oxidizer Measured	Monochloramine	Peracetic Acid	Ozone	H2O2
Oxidizer Range	0.00–5.00ppm	0.00–100.00ppm	0.00–2.00ppm	0.00–200ppm
Oxidizer Precision	±0.01mg/L or 1%	±0.2ppm or ±5%	±0.01mg/L or 1%	±0.2mg/L or ±1%
pH Range	0–14			
pH Precision	±0.01pH			
pH Compensation	Up to 9.0+			
Sensor Body Material	316L Stainless Steel			

Item	ST-765SS-SO3	ST-765SS-DCL
Part Number	53624	59907
Oxidizer Measured	N/A	Free or Total Chlorine
Oxidizer Range	N/A	0.00–5.00ppm
Oxidizer Precision	N/A	±0.01mg/L or 1%
Reducer Measured	Sulfite	
Reducer Range	0.00–5.00 (Default); 0–100.00ppm MAX	0.00–100.00ppm
Reducer Precision	±1mg/L or 1% when in MAX SPAN Mode	
pH Range	0–14	
pH Precision	±0.01pH	
pH Compensation	Up to 9.0+	
Sensor Body Material	316L Stainless Steel	

Item	ST-765SS-TFCL
Part Number	55994
Oxidizers Measured	Free Chlorine + Total Chlorine
Oxidizer Ranges	0.00–5.00ppm + 0.00–5.00ppm
Oxidizer Precision	±0.01mg/L or 1%
pH Range	0–14
pH Precision	±0.01pH
pH Compensation	Up to 9.0+
Sensor Body Material	316L Stainless Steel

DIRTY-INDUSTRIAL WATER APPLICATION INSTALLATION FORMAT

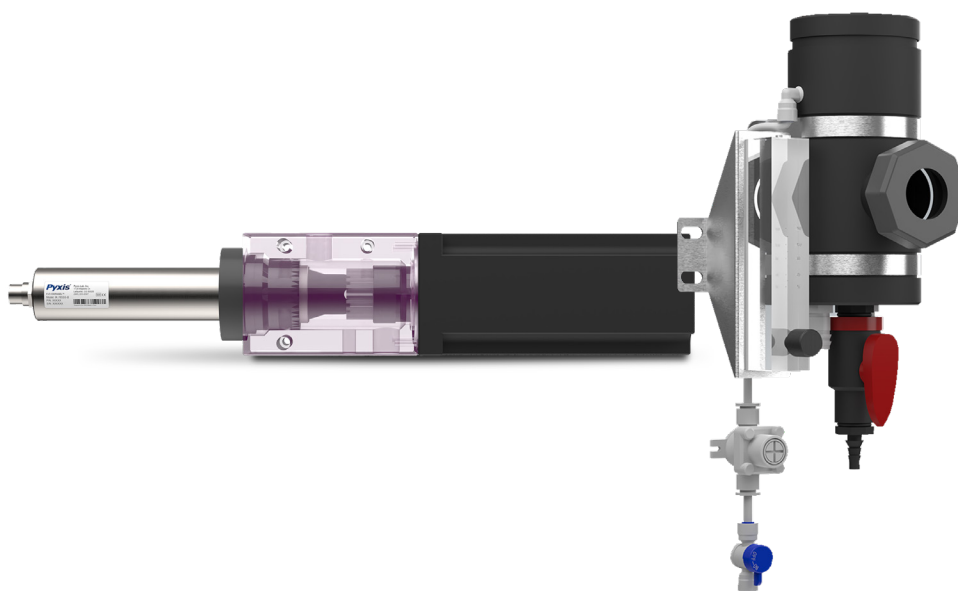
Item	FR-300-PLUS
Part Number	50700-A44
Sample Inlet Pressure	7.25–30psi (0.05–0.2MPa)
Installation	Auto-Brushing Flow Reservoir for DIRTY Water Applications
Suggested Flow Rate	200–800mL/minute
Sample Inlet & Outlet	3⁄8 inch - OD
Operation	24VDC, 2.5W Powered Constant ON Mode for Relay Control and RS-485
Rotational Speed	200RPM – Motorized Brush Preset for Constant Operation

NOTE: The FR-300 PLUS is sold separately and REQUIRED for use in Dirty/Industrial Applications and can be used in Clean Water.

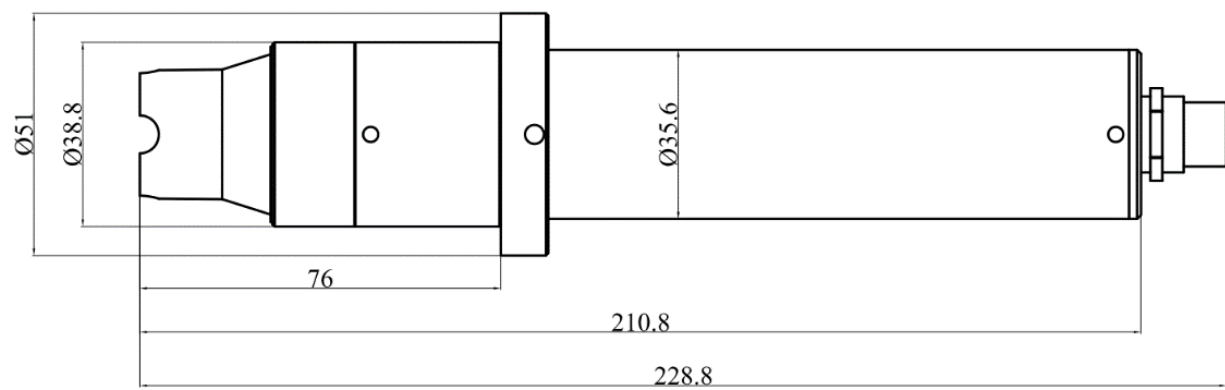
CLEAN-POTABLE WATER APPLICATION INSTALLATION FORMATS

Item	ST-007	FR-50
Part Number	50700-A51	50700-A01
Sample Inlet Pressure	7.25–30psi (0.05–0.2MPa)	7.25–30psi (0.05–0.2MPa)
Installation	Inline Tee Assembly, Rotameter Not Incl.	Flow Reservoir with Rotameter & PRV
Suggested Flow Rate	200–400mL/minute	600–1,800mL/min
Sample Inlet & Outlet	1⁄4 inch - OD Compression	1⁄4 inch - OD Compression Inlet 1⁄2 inch - NPT Drain 20mm Outlet & Overflow

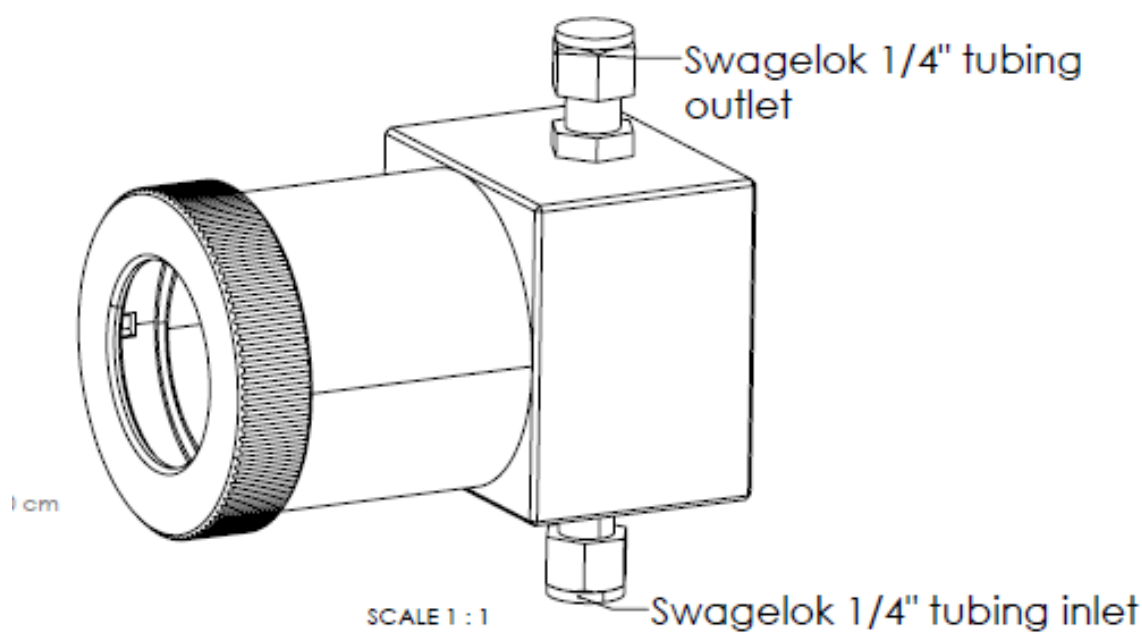
NOTE: The ST-007 & FR-50 are purchased separately and should be installed downstream of a Rotameter for Clean Water Applications. Contact service@pyxis-lab.com for suggested guidelines for water quality to determine clean -vs- dirty water applications.



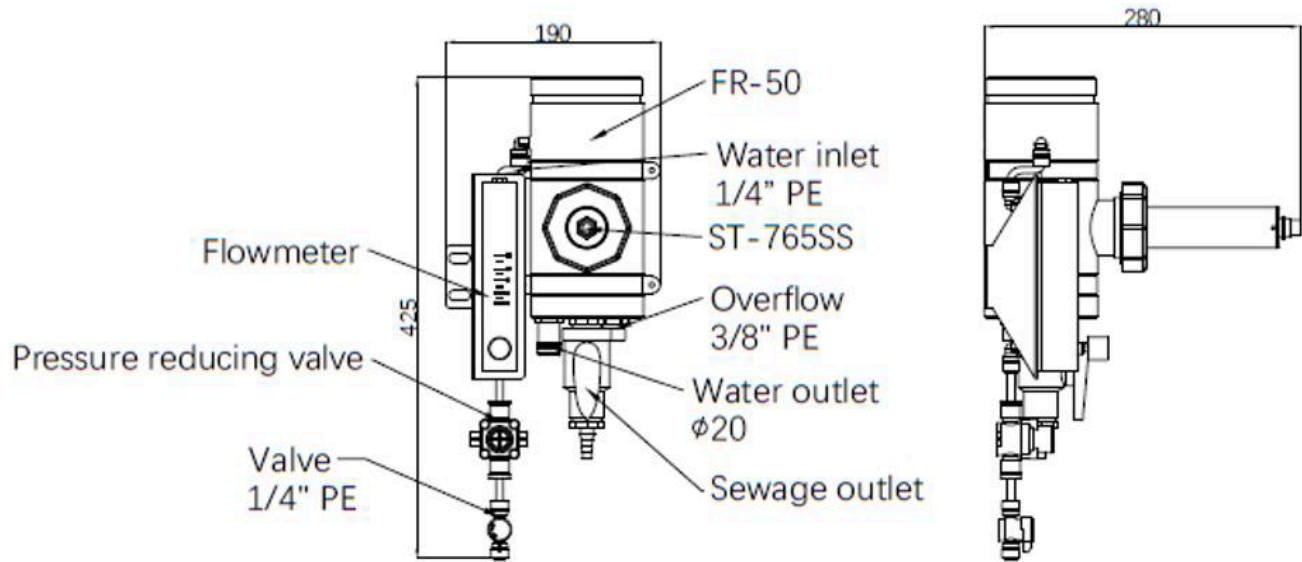
SENSOR DIMENSIONS



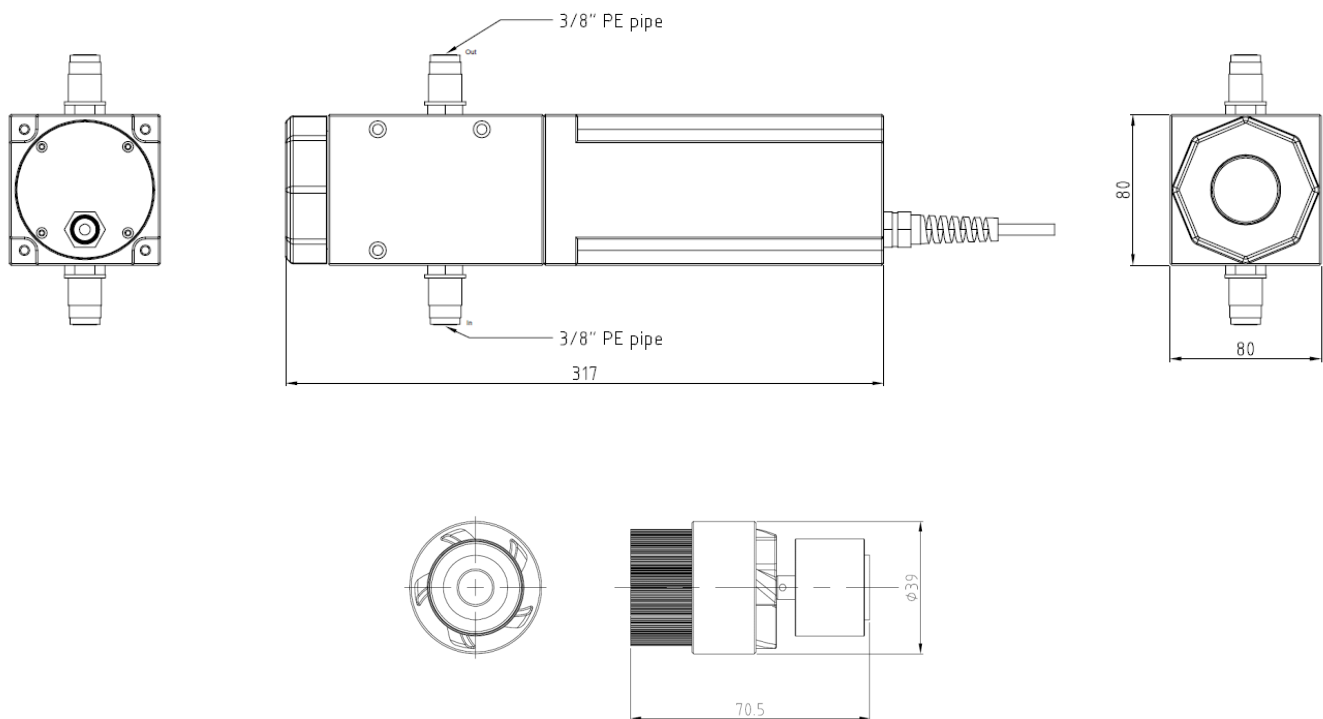
ST-007 DIMENSIONS



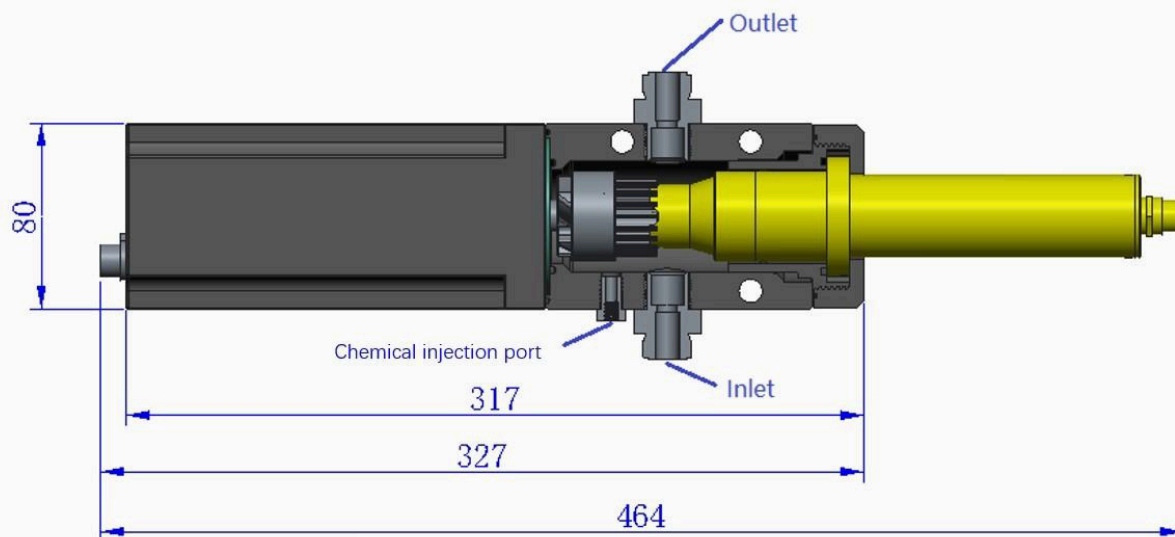
FR-50 DIMENSIONS



FR-300 PLUS DIMENSIONS



FR-300 PLUS COMPONENTS SCHEMATIC



CLEANING & CALIBRATION

The uPyxis® App manages all Pyxis portable meter and inline sensors on mobile and desktop devices, including Apple iPhones and Samsung Android smartphones. When connected to the Pyxis ST-765SS Series inline sensors, the uPyxis APP enables users to conduct a wireless probe calibration of pH and oxidizer from the touch of their smart device. The uPyxis direct calibration of the sensor eliminates unnecessary time wasted with calibrating the probe through the receiving controller and ensures the highest degree of accuracy and minimizes time spent in the field. For wireless uPyxis® access of the ST-765SS-PAA, users will need the MA-CR Bluetooth® Adapter.

Contact service@pyxis-lab.com for Support



ORDER INFORMATION

ST-765SS-FCL Inline Free Chlorine Sensor	53607
ST-765SS-TCL Inline Total Chlorine Sensor	53616
ST-765SS-CLO Inline Chlorine Dioxide Sensor	53608
ST-765SS-Br Inline Bromine Sensor	59643
ST-765SS-NCL Inline Monochloramine Sensor	53623
ST-765SS-PAA Inline Peracetic Acid Sensor	53610
ST-765SS-H2O2 Inline Hydrogen Peroxide Sensor	53612
ST-765SS-O3 Inline Ozone Sensor	53614
ST-765SS-SO3 Inline Sulfite Sensor	53624
ST-765SS-DCL Inline Free Chlorine + Sulfite Sensor	59907
ST-765SS-TFCL Inline Free Chlorine + Total Chlorine Sensor	55994

PART NUMBER

OPTIONAL/REPLACEMENT ACCESSORIES

EH-765 Replacement Electrode	53061
EH-765-01 Replacement Electrode (PAA, DCL, TFCL)	27918
EH-765-03 Replacement Electrode (O3)	22603
FR-300-PLUS Auto Brushing Flow Reservoir for Dirty Water	50700-A44
FRP-300-1 Replacement Brush	50700-A49
FR-300-03 Brush Extraction Tool	23504
FR-50 Flow Reservoir for Clean Water	50700-A01
ST-007 Inline Tee Assembly for Clean Water	50700-A51
MA-AC-7US 110VAC Power Supply Adapter for FR-300+ (USA)	26398
MA-AC-7EU 230VAC Power Supply Adapter for FR-300+ (EU)	28787
NanoFlow Ultrasonic Flow Meter & Regulating Valve Module	21329
MA-CR Bluetooth® Adapter	MA-CR
PowerPACK-2 Dual Power Supply & Bluetooth® Adapter	MA-BLE-2
MA-50CR 50' Extension Cable	50743
SP-200 OXIPOCKET Colorimeter	50802