



TRASAR® Pen Fluorometer

Specifications & Instructions



TRASAR® 3 Pen Fluorometer

Compact size provides maximum testing flexibility

New integrated turbidity correction factor

No more sample cells to keep clean or maintain

Fast, easy two-point calibration for accurate TRASAR® readings

Waterproof body makes for a more rugged instrument

Diagnostic testing of systems for improved control, information and troubleshooting

Applications: Boiler water, Cooling Water, Leak Detection, Diagnostics

Description

The battery-powered Pen Fluorometer is designed to take quick, easy, reliable TRASAR® measurements of boiler or cooling water samples. It consists of:

- Waterproof molded housing
- Three function keys
- Dual line LCD display
- Permanently installed fluorometer tip

Measurements are obtained by immersing the tip in a sample, pressing a key and reading the result on the display. Two other keys allow for calibration and setting of operational parameters.

Ordering Information

Included with the Hand-Held Pen Fluorometer are four 1.55V Silver Oxide batteries, a Training CD and the Operation Manual

| Part No. | Description |
|----------------|---|
| 060-TSR3PEN.88 | TRASAR® 3 Hand-Held Pen Fluorometer (boiler water) |
| 060-TSR2PEN.88 | TRASAR® 2 Hand-Held Pen Fluorometer (cooling water) |
| 460-S0980.75 | TRASAR® 3 Calibration Solution, 1L |
| 460-S0920.75 | TRASAR® 2 Calibration Solution, 1L |
| 500-P0197.88 | Beaker, plastic, 100ml |

Specifications

Power: 4 x 1.55V Silver Oxide battery (Duracell 357 Silver Oxide [303/357B] or Energizer Silver Oxide [357/303])

Battery Life: Approx. 1000 readings

Dimensions (LxD): 18x4cm (boxed 22x6x5cm)

Weight: 149g (boxed 170g)

Enclosure: IP67

Display: Dual line with 4 digits per line

Keypad: Membrane with 3 keys

Ambient Temperature: 0-50°C

TRASAR® Product Measurement

Range: 0-9999ppm product

Resolution: 0.1ppm product

Relative accuracy: ± 5 % of reading

Calibration: Two-point calibration – DI Water and calibration solution

Temperature Measurement

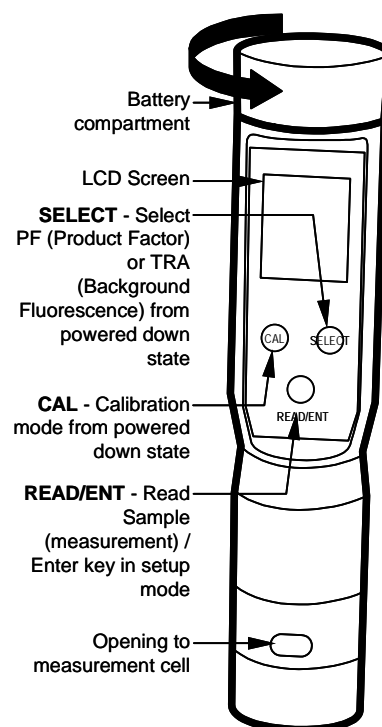
Range: 5.0 to 50.0°C

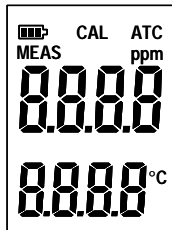
Resolution: 0.1°C

Relative accuracy: 0.5°C after 15 seconds

Sample Temperature Compensation: Automatic Temperature Compensation (ATC)

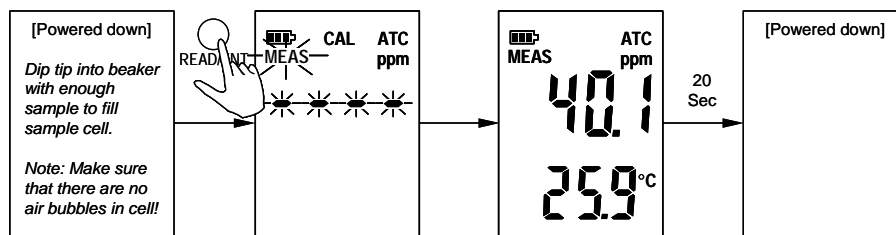
Operation



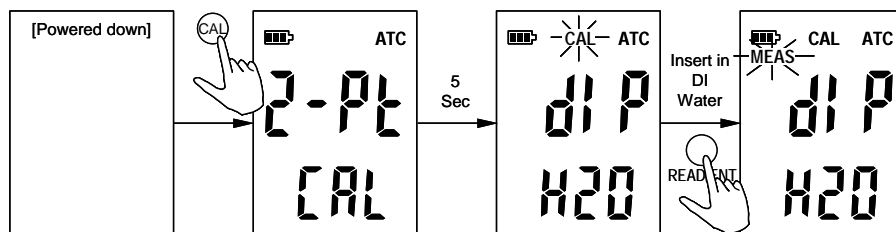


- MEAS** In measurement mode
- CAL** In calibration mode
- ATC** Automatic Temperature Compensation
- ppm** Product concentration unit (parts per million)
- °C** Sample temperature unit
- Batteries full < 1000 measurements
- 300-500 measurements
- <300 measurements
- Batteries empty – replace

Measurement

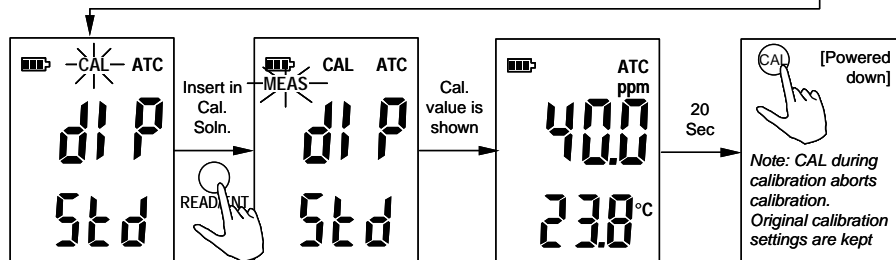
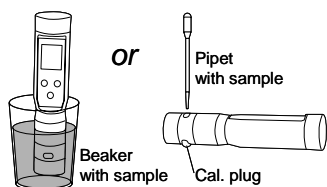


Calibration



Calibration Plug

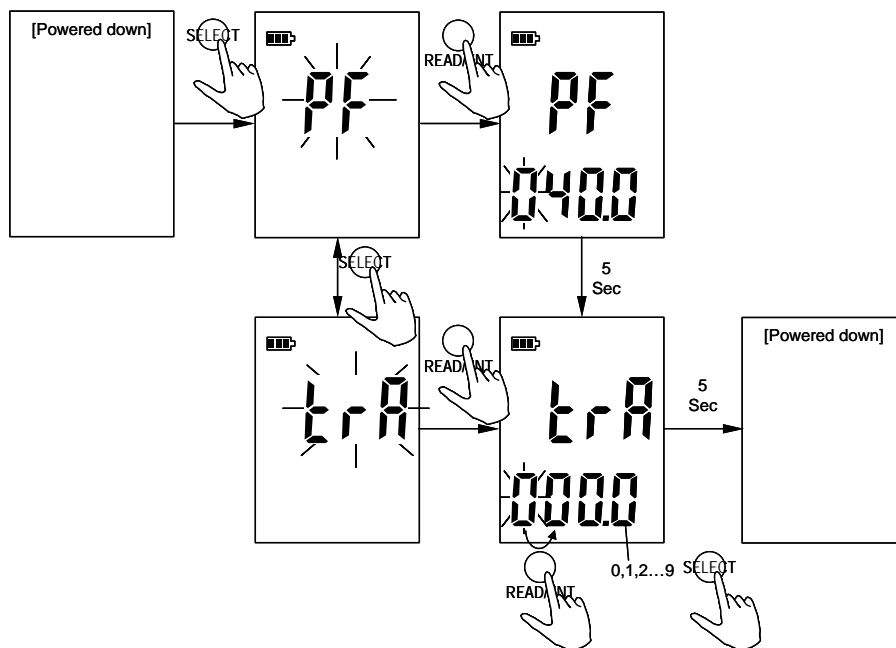
Instead of dipping the fluorometer into a beaker, a calibration plug and pipet can be used to fill the cell:



Product Factor PF & Background Fluorescence TRA

Error Codes

- HI conc** Measured Fluorescence value > max. value
- too hot** Temperature > 50°C
- HI LitE** High ambient light – above a threshold during dark measurements.
- dEt1 FAIL** Main detector low – below a threshold during LED on measurements.
- dEt2 FAIL** Ref detector low – below a threshold during LED on measurements.
- LEd1 FAIL** LED 1 failure
- LEd2 FAIL** LED 2 failure
- HI turb** Sample too turbid or bubbles in probe tip
- CAL FAIL** Calibration value not within calibration window



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