

PTSA or Fluorescein Transmitters



Little Dipper™ 2 In-line Fluorometer

Turner Designs' Little Dipper 2 is an accurate, single channel, light industrial fluorometer which installs directly into process streams. It is a rugged, 24/7 sampling device that provides an analog signal output proportional to the concentration of the fluorophore being measured. It can be used with controllers such as the W600 and W900 Series to monitor and control the level of treatment chemicals for cooling tower and boiler applications.



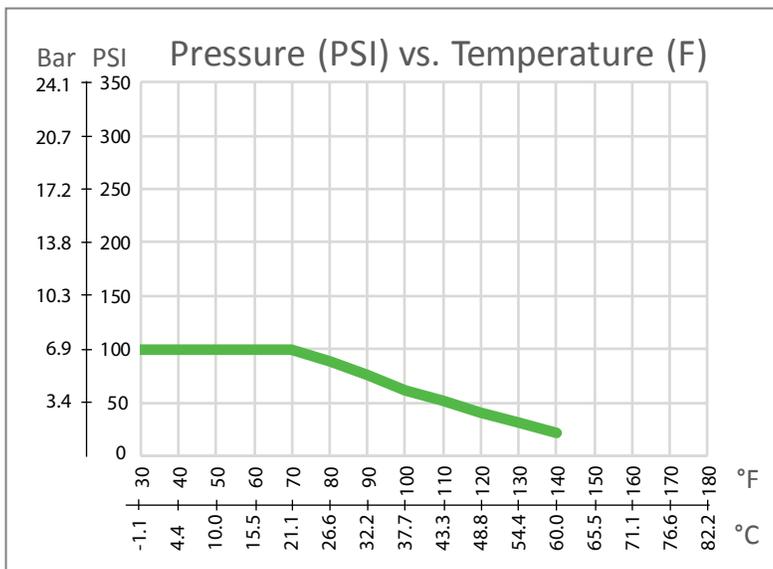
Summary of Key Benefits

- Simple calibration with Walchem controllers
- Simple installation - now with built-in isolator
- Provides better control of treatment chemicals
- Solid-state LED/Photodiode technology, no moving parts
- Typical sensitivity to less than 1 ppb
- Quick-disconnect watertight connector
- Improved turbidity and dissolved iron rejection

SPECIFICATIONS

Mounting Tee

Parameter	Specification	
	1"	3/4"
Materials	PVC - Type I, molded plastic, FKM O-ring	Glass-filled Polypropylene, FKM O-ring
Threading	1" NPTF	3/4" NPTF
Length	3.3 inches (8.4 cm)	
Dynamic pressure rating	100 PSI (6.9 bar) (see graph)	
Temperature rating	122°F (50°C) (see graph)	



Fluorometer

Parameter	Specification
Dynamic Range	1-300 ppb PTSA 1-100 ppb Fluorescein
Factory Calibration	1-200 ppb PTSA 1-100 ppb Fluorescein
Power draw	0.8 W @ 12 VDC (1.0 W max)
Input voltage	8 to 30 VDC
Signal output	4-20 mA
Light source	Light emitting diode
Detector	Photodiode
Warm-up time	5 seconds
Length	8.63 inches (21.9 cm)
Diameter (housing)	1.3 inches (3.3 cm)
Diameter (max)	1.72 inches (4.4 cm)
Weight	4.4 oz (125 g)
Material	PVC- Type I, molded plastic

ORDER INFORMATION

- 103963 Little Dipper 2, PTSA, 1" Tee
- 103964 Little Dipper 2, Fluorescein, 1" Tee
- 191723 Little Dipper 2, PTSA, 3/4" Tee
- 191724 Little Dipper 2, Fluorescein, 3/4" Tee
- 103967 Little Dipper 2, PTSA, No Tee
- 103968 Little Dipper 2, Fluorescein, No Tee
- 191721 Calibration Tee, Little Dipper 2
- 103773 Calibration Standard, PTSA, 300 ppb
- 103998 Calibration Cable

WALCHEM

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Handheld Fluorometer



Handheld Little Dipper Fluorometer

The Handheld Little Dipper is a small, lightweight, highly durable handheld fluorometer ideal for quick measurements in the field. Two versions are available for both cooling tower and boiler system applications. Simple to operate, the Handheld Little Dipper is a perfect tool for system verification.

Summary of Key Benefits

- Dustproof, watertight, highly durable case
- Small size easily fits in shirt or jacket pocket
- Operates using AA batteries for >10,000 measurements per set
- Single-point (100 ppb) calibration
- 5 second warm up
- Low maintenance field fluorometer



SPECIFICATIONS

Parameter	Specification
Linear Range	0-200 ppb typical for fluorescein 0-200 ppb typical for PTSA
Sensitivity	1 ppb typical for fluorescein and PTSA
Temperature	41 - 104°F (5 - 40°C)
Warm-up time	5 seconds
Case	IP67 standard: dustproof/waterproof
Power	2 AA batteries
Light source	LED
Detector	Photodiode
Weight	4.3 oz (120 kg)
Size	8.9"x 2.0"x 1.75" (22.6 cm x 5.1 cm x 4.5 cm)

ORDER INFORMATION

103965	Handheld, PTSA
103966	Handheld, Fluorescein
104045	Calibration Standard, PTSA, 100 ppb
104046	Calibration Standard, Fluorescein, 100 ppb



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