



CUSTOM SENSORS & TECHNOLOGY

A DIVISION OF CUSTOM SAMPLE SYSTEMS

PX2 PHOTOMETRIC TRANSMITTERS

PX2-DIN Packaging, PX2, & PX2+



ABOUT PX2 PHOTOMETRIC TRANSMITTERS

The PX2 Family of Photometric Transmitters were designed to improve operational control, compliance, and product yield by providing real-time absorbance or fluorescence data for applications including chromatography, tangential flow filtration, ultrafiltration, and depth filtration. Available in single and dual wavelength configurations, the PX2 can be equipped with light sources from 200-2400 nm to measure the absorbance or fluorescence of a sample. Users communicate with the transmitter via 4-20 mA outputs, RS-485 (Modbus), and USB-B to CST software. The PX2 is installed with a process interface accessory, such as a flow cell or probe, with two fiber optic cables that send and receive light from the sensor. By implementing the PX2 throughout downstream operations, users can assess product purity, optimize product recovery, and further enable process control.

PROCESSES

- Chromatography
- Tangential Flow Filtration
- Ultrafiltration
- Depth Filtration
- Centrifugation
- Fill & Finish

APPLICATIONS

- Protein and mRNA Concentration Monitoring
- TFF Permeate and Retentate Monitoring (+350 mg/ml)
- DNA/RNA Purity and Concentration Monitoring
- Filter Breakthrough Detection
- Tracking equilibration, load, wash, elution, and post-elution cleaning processes
- Turbidity and Color measurements



ABSORBANCE SPECIFICATIONS

Measurement Method: Absorbance

Measurement Range: 0-3 AU

Accuracy: $\pm 1\%$ 0-2 AU of full scale or better, $\pm 2\%$ 2-3 AU

Wavelength Range: 200-2400 nm

Common LED Wavelengths (single & dual configurations available): 255, 260, 280, 300, 310, and 880 nm (other wavelengths available upon request)

FLUORESCENCE SPECIFICATIONS

Measurement Method: Fluorescence

Measurement Range: 0-65,000 intensity counts

Accuracy: $\pm 1\%$ of full scale

Wavelength Range: 230-700 nm

GENERAL SPECIFICATIONS

Available Light Sources: LEDs, Xenon Flash Lamp, Tungsten Halogen Lamp

Repeatability: $\pm 0.5\%$ of full scale or better

Analog Output: 4-20 mA

Analog Loop Resistance: 500 ohms at 24VDC

Digital Output: RS-485 (Modbus), USB to CST Software

Power Requirements: 24 VDC nominal (12-48 VDC)

Power Consumption: 8.5 W max

Operating Temperature: 41-122°F (5 to 50°C)

Storage Temperature: -4-122°F (-20 to 50°C)

PX2 Dimensions: 4" x 4" x 2.5"

PX2+ Dimensions: 5" x 5.8" x 2.8"

PX2-DIN Dimensions: 4" x 2.75" x 3.3"

Enclosure Material: Anodized Aluminum



www.customsensors.com
sales@customsensors.com