

NEW! FluorLite-LX™ Sensor

Online fluorescent sensor for protein measurement

FEATURES

- ❖ Low Protein Level Sensitivity – measures as low as 100 PPM (0.01%) whey protein
- ❖ Measures “True” Protein
- ❖ PLC Based Operation
- ❖ Solids and Temperature Content Compensation
- ❖ 4-20 mA Output
- ❖ LED Based (no bulbs to replace)
- ❖ Easily Calibration



Developed for online monitoring and measurement of “true” protein in whey permeate - importantly ignoring non-protein nitrogen.

A recent novel innovation automatically corrects measurement for the light-extinction effect of solids in whey permeate.

Measurement range is between 0.01% and 1% protein (100 – 10,000 PPM) and up to 8% solids.

Features microprocessor control, automatic temperature correction, one 4-20mA output signal, and simple PLC integration.

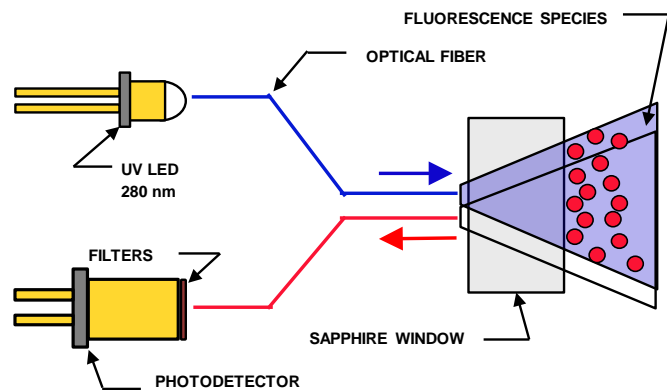


Fig. 1. Simplified Optical Configuration of the FluorLite-LX™ sensor.

FluorLite-LX™ Technical Specifications

<ul style="list-style-type: none"> ❖ Standard Compliance: ❖ Product Contact O-Rings ❖ Sensor housing and ferrule ❖ Optical Window ❖ UVLED wavelength ❖ Cable ❖ Operating Temperature Limits ❖ Connections ❖ Power Supply ❖ Output Signal ❖ Signal Input ❖ Serial Number 	<p>NEMA 4X (watertight, corrosion resistant); 3A Sanitary Standard 46-04; EC 1935/2004; CE Viton 316 SS Sapphire 280 nm M12, Quick disconnect, watertight, IP 68k Rated Fluorescent measurement 5 - 60°C; Sensor 100°C 2" Tri-Clamp +24 VDC, 100 mA max., low noise One 4-20 mA signal One 24V digital signal for measurement trigger SN and date etched onto SS (420-20201231)</p>
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The FluorLite-LX measures the amino acid tryptophan which is a component of whey proteins. The sensor's response to different protein and solids concentrations in whey permeate is shown in Figure 2.

The response of the FluorLite-P in a whey processing system is shown in Figure 3.

The FluorLite-LX is totally controlled by the plant PLC and dimensions are illustrated in Figure 4.

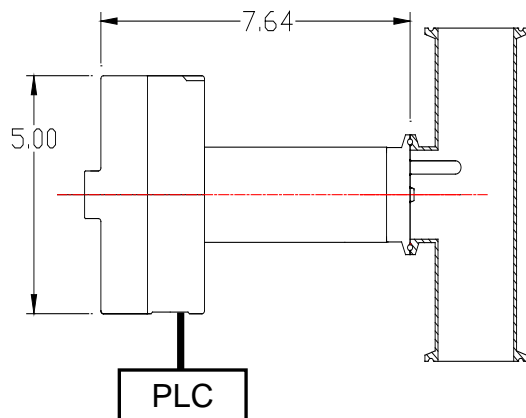


Fig. 4. The FluorLite-LX sensor connects direct to a PLC for 24V power, digital trigger signal, and 4-20 mA output measurement. Calibration is conducted through the PLC.

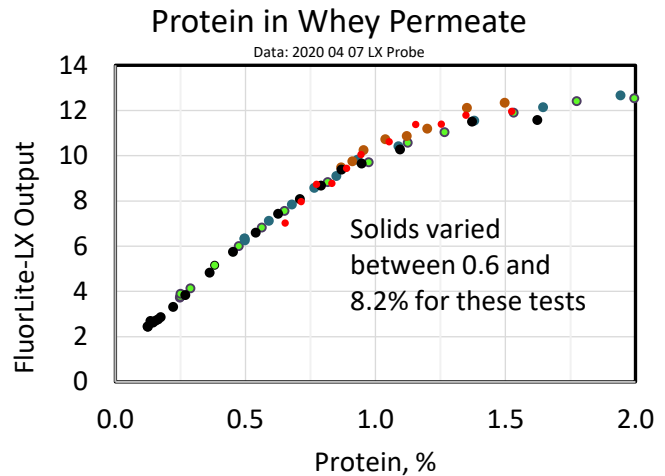


Fig. 2. FluorLite-LX response to whey permeate with varying protein and solids concentrations.

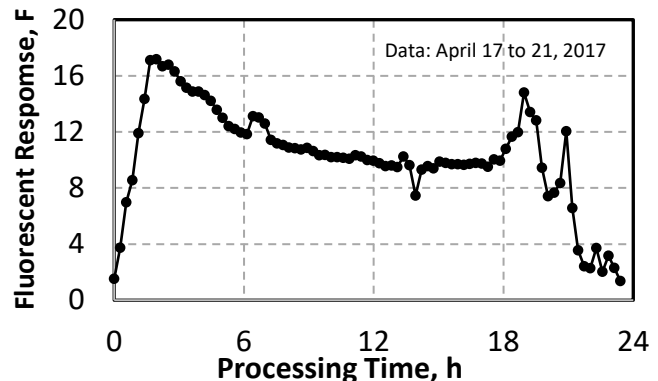


Fig. 3. Response of the FluorLite-P sensor to protein in whey permeate. Average of 4 days response.