Monitoring lamp performance on a continuous basis can help protect against improper curing, and can help save the time, money and waste associated with premature or late UV lamp replacement. The LampLine UV Intensity Monitor is an electro-optic instrument designed for continuous online UV lamp monitoring. Through continuous monitoring, each unit indicates one UV lamp's relative UV output as compared to new to verify on-going lamp performance.

This system consists of an electronic signal conditioning module and an online sensor. The Intensity Monitor is available in three different models:

- The LampLine Panel Mount Monitor features a single open frame board designed specifically for applications requiring a front panel display (which can be easily mounted in the control panel of any power supply). One display board and one LampLine sensor are mounted for each lamp, and the resulting analog output provides an industry standard signal for input to SPC or ISO-9000 data acquisition, integrated control and distributed control systems.

- The LampLine DIN conditioning module enclosure easy mounts onto any standard DIN rail for positioning anywhere on the equipment, and for allowing several units to be installed into a compact area. Features user settable low limit alarm. Connect to any standard LampLine sensor and interface with data acquisition software to store and monitor on-going operating performance variables.

- The LampLine Multi-channel Monitor is a 4-channel conditioning module for monitoring the performance of up to 4 lamps simultaneously. With a front panel display built-in to the panel mount module, and featuring individual high and low presets for each channel, this system provides output feedback and LCD readouts. Designed for systems using more than one lamp, simply turn the selector switch to view output for any particular lamp or for displaying the common low limit signal.

Each system utilizes the LampLine UV Intensity Sensor for detection. The sensor signal is converted to voltage level, which is supplied to a continuous three-digit display to represent the percentage of lamp output relative to the initial calibration level. The preset low level threshold and red "low limit" indicator light will warn the user that this threshold has been breached. When operating normally, the green "above" threshold light will be visible.
LampLine UV Intensity Monitor

Three models offer continuous monitoring of energy output from single or multiple UV lamp sources to provide reliable, numerical values of lamp performance and degradation.

The sensors are permanently mounted within the UV source and are equipped with 10' (3m) of cable. Sensors are compatible with any UV source, such as mercury vapor, electrodeless, deuterium or any other lamp, which produces an output within the UV spectrum. Standard LampLine sensors may be ordered in 250-260nm, 280-320nm or 395-445nm spectral regions. Sensors in other wavelengths are available upon request. Extender cables in 10' lengths are also available.

Specifications

LampLine Panel Mount UV Intensity Monitor Specifications:
- Power Source: 20-28V AC or DC; 500mA maximum
- Output: 0-10 volt DC - proportional to UV intensity; display indication of 100%=5V
- Accuracy: Typically within +/-3% as compared to full scale (10 volts, 200%)
- Relay Trip Point: Typically within +/-5% from threshold setting as compared to 200%
- Dimensions: Open frame construction (no case); 5.25 x 3.75" (13.34 x 9.53cm); Depth: 3.5" (8.89cm)
- Case: Front plate: 6.5 x 5" (16.51 x 12.7cm)
- Weight: 4.60 oz (115g)
- Display: 2-1/2" digit, 0.5" high digits
- Display Range: 0-199%
- Operating Temp.: 0-50° C

LampLine DIN Rail UV Intensity Monitor Specifications:
- Power Source: 20-28V AC or DC at 70mA maximum
- Output: 0-10 VDC - proportional to UV intensity Typically within +/-3% as compared to full scale (10 volts)
- Relay Trip Point: Typically within +/-5% from threshold setting as compared to full scale
- Dimensions: 3.11"W x 3.56"H x 0.98"D (7.90 x 9.04 x 2.49cm)
- Weight: 3.6 oz (101g)
- Operating Temp.: 0 - 50° C

LampLine Multichannel UV Intensity Monitor** Specifications:
- Display: 3 digit LCD, 0.5" high digits
- Display Range: 0-199%
- Operating Temp.: 0 - 50° C
- Input Current: 0.2-2.0 microamperes for “100%” full scale reading; Adjustable via 20 turn “calibration” adjustment
- Output Current: 4 to 20mA into a maximum impedance of 10 K
- Alarm Outputs: Dry contacts rates for 0.5A at 125VAC driving a resistive load
- Input Power: 90 to 132 VAC to 440 Hz 0.20 amperes
- Weight: 3 pounds
- Dimensions: Enclosure: 7.0"W x 3.5"H x 5.9"D; Front Panel: 8.4"W x 3.5"H
- Construction: Painted aluminum with integral mounting flanges
- Mounting: Panel mounted (1/2 rack dimensions)

LampLine Sensor Specifications:
- Dimensions: 3/4" OD x 1-1/2" long (1.91 x 3.8cm)
- Spectral Range: 250-260nm, 280-320nm, 320-390nm, or 395-445nm (select one per module ordered; up to 4 for Multichannel)
- Weight: 4 oz. with cable (113g)
- Cable: Coaxial Teflon, shielded, 10' (3m)
- Operating Temp.: 0-75° C

**Specify High Power (10mW/cm2 to 10W/cm2) or Low Power (100uW/cm2 to 100mW/cm2) and spectral range of 250 to 260nm, 260 to 320nm, 320-390nm or 395-445nm. Sensor sold separately.