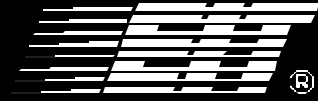


# 4 Channel UV Monitoring System MULTIBRITE™



## Features

- Monitors output of 4 UV lamp sources simultaneously
- Provides timely relamping information
- Audible and visual alarms
- Digital readout
- Low output alarm
- Standard linear outputs for remote monitoring
- Cascadable remote alarm output
- Individual channel alarm lockout
- Programmable alarm delay

## Applications

- Monitor UV lamp intensity
- Reliable lamp replacement indicator
- Indication of when to clean lamp reflectors
- Process control measurement

## Introduction

To get good curing results consistently, it is important to know when to replace the lamps. If the lamps are only replaced at set time intervals, they may be replaced too soon or too late. Money is wasted if the lamps are still good. Product is wasted if the lamps are overdue for replacement. The human eye, unable to detect UV light, must rely on an instrument designed to monitor only UV within a specified bandwidth. MULTIBRITE can help eliminate guesswork, reduce waste, and assure consistent product quality to save time and money.

The MULTIBRITE 4-channel UV Monitoring System is an electro-optical instrument designed to track up to four UV lamps simultaneously. It will operate with any UV source such as mercury, electrodeless, xenon, deuterium or other lamp producing an output at 250-260nm, 280-320nm, 320-390nm, or 395-445nm. It displays the relative output of each lamp's intensity. The MULTIBRITE sounds an alarm if the output of a lamp falls below a percentage set by the user.

## Installation

MULTIBRITE is easy to install. The enclosure can be wall, panel, or rack mounted, or simply set on a surface.

Each sensor is mounted on the UV system where it can receive a sufficient amount of UV light. The sensor has a 10' cable (custom lengths available) to connect to the MULTIBRITE. Hardware is provided to simplify sensor mounting.



## Operation

After installation, the user calibrates the MULTIBRITE. When the lamps are new and the irradiators are clean, the MULTIBRITE is set to read 100% on each channel used. The user then determines a Lower Limit percentage for the alarms and sets it. Front panel switches select which channel (or Lower Limit) is displayed.

Low-level signals from the individual sensors are converted to a voltage level for signal monitoring and display. A 4-20mA / 0-10 V output for each channel allows interfacing to a programmable logic controller, personal computer or other data collection device.

If a channel's output falls below the Lower Limit setting, a comparator circuit drives the alarm outputs. The internal audible/visual alarm is enabled or disabled by a switch on the front panel.

When a lamp needs to be replaced or has been removed, the channel can be put on standby. The MULTIBRITE will continue to monitor the other channels and ignore the standby channel.

An alarm delay function allows time for the lamp(s) to turn on before the monitor to prevent a false alarm. MULTIBRITEs can be cascaded so that more than four lamps can be monitored by several MULTIBRITE systems - each interconnected so that any lamp dropping below the Lower Limit will trigger a common alarm.

## Specifications:

### MULTIBRITE Display Module

Display	3 digit LED, 0.5" high digits. Front panel switches select channel to display.
Display Range	0 - 199%
Power Source	90 - 132VAC, 47 - 440 Hz, 200 mA
Input Current Range	0.2 - 2.0 microamperes adjustable for 100% full scale reading.
Output Current Range	4 - 20 mA into a maximum impedance of 250 ohms
Output Voltage Range	0 - 10 VDC into a minimum impedance of 10K ohms 0 - 5 VDC into a minimum impedance of 5K ohms
Alarm Outputs	Dry contacts rated for 500 mA at 125VAC driving a resistive load
Accuracy	+/-3% as compared to full scale (10 volts, 200%); Relay Trip Point: +/-5%
Overall Dimensions	Enclosure: 7.0"W x 3.5"H x 5.9"D (17.8 x 8.9 x 15.0cm). Front Panel 8.4"W x 3.5"H (21.3 x 8.9cm)
Mounting	Panel mounted (1/2 rack dimensions)
Material	Painted aluminum
Weight	3 lbs. (1.35 Kg)
Operating Temperature Range	0-50° C
Features	Green above limit LED, red below limit LED; Relay contacts - normally open or normally closed

### UVISENSOR

Spectral Range	250-260nm, 280-320nm, 320-390nm, or 395-445nm
Dimensions	0.75"OD x 1.5"L (1.9 x 3.8cm)
Material	Aluminum housing
Cable	Teflon insulated, shielded, 10' (3m) long
Connector	BNC
Temperature Range	0-75° C

### Compact Sensor

Spectral Range	250-260nm, 280-320nm, 320-390nm, or 395-445nm
Dimensions	0.57" x 1.09" x 0.92" (1.45 x 2.77 x 2.34cm)
Material	Aluminum housing
Cable	Teflon insulated, shielded, 10' (3m) long
Connector	BNC
Temperature Range	0-100°C