

# UltraDynamics®

## Series 8102-DM

### Ultraviolet Intensity Monitor

The UltraDynamics Model 8102-DM is a digital indicator/alarm instrument for use in monitoring ultraviolet energy emitted by germicidal UV lamps in a disinfection reaction chamber.

The monitor receiver electronics are mounted in an attractive impact resistant, enclosure measuring approximately 6”h x 4.5”w x 3”d. The sensor is cylindrical and measures approximately 1” diameter x 3.5” long. The sensor is mounted between 2 UV lamps within an open channel UV reactor and is mounted in the side monitor port on closed vessel reactors. The sensor is connected to the monitor electronics by a standard 25 foot cable (supplied with the system).

#### Functional Description:

The UV sensor incorporates a photodiode, which is used in conjunction with a signal conditioning circuit mounted within the sensor probe. UV energy passes through the sensor lens and & converted to an electronic signal and transmitted to the UV monitor receiver via the 25 foot long, 3-conductor cable. The UV monitor receiver displays the UV output on a scale of zero to 100% on a bright red LED display. One fully adjustable alarm set point is provided with an audible alarm and a form “C” dry contact output. A 4-20maDC signal is provided directly proportional to the percent UV output displayed on the LED display.

#### Mounting:

The 8102-DM can be mounted two ways: 1) Wall mounted 2) Front panel (through door) mounting. On UltraDynamics UV systems supplied with remote power supply centers, the 8102-DM can be panel mounted through the power supply center door. On UltraDynamics UV systems supplied without remote power supply center, the 8102-DM is supplied loose , for wall mounting by the installer.



#### Features:

- ◆ Stainless Steel Construction
- ◆ Sensor reads within narrowband germicidal range
- ◆ Solar blind sensor
- ◆ Unpowered Form “C” dry contacts
- ◆ 4-20 mA output signal

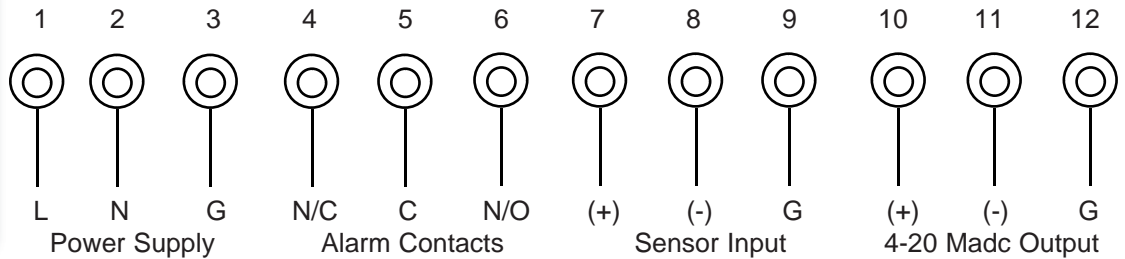


## SPECIFICATIONS:

<b>Power requirements:</b>	110/220 VAC or 12 - 24 VDC, 0.4 A
<b>Weight:</b>	1 lb. 6 oz
<b>Case Material:</b>	Flame retardant ABS plastic
<b>Display resolution:</b>	1%
<b>Accuracy:</b>	+/-0.1%
<b>Range:</b>	0-150%
<b>Relay contacts:</b>	10 A 125Vac (6 amp 250 Vac) form "c"



## ELECTRICAL CONNECTIONS:



### Warranty and Capability

Severn Trent Services UltraDynamics® Ultraviolet Disinfection products are warranted for eighteen months from the date of invoice, or twelve months from the date of installation, whichever is earlier.

Disinfection technologies, water quality monitors and instrumentation for water and wastewater are areas of specialization. Over 35 years of industrial and municipal application experience in the water and wastewater industries.

#### Severn Trent Services

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