

### **THORNTON**

Leading Pure Water Analytics

## 656 Pure Light™ Water Quality Indicator/Timer

Red, Green Indicator lights

5 selectable ranges

Safe, low voltage

Gold plated electrodes

**Timer Function** 



# 656 Pure Light™

For Simple Water Quality Indication



## 656 Pure Light

## Water Quality Indicator with Timer

The Pure Light<sup>TM</sup> is a go/no-go indicator for the quality of pure water from purification systems including service deionization, reverse osmosis, and distillation. Under normal conditions, the green light is illuminated, indicating that the water is in the acceptable purity range. When the purity falls below the user selected set point, the indicator light switches from green to red. The user can activate the timer function to also alarm based on time and prevent organic or biological fouling of the system. This easy to interpret, go/no-go, signal alerts the user to take appropriate action.

#### **Low Voltage Operation**

For safety, the indicator operates on 6 VAC.

#### Five Ranges - User Selectable

The Pure Light has a jumper that permits the user to select the acceptable purity level threshold to meet the application. The threshold limit can be re-set as needed, to one of the following five settings. One flexible indicator can meet all user needs.

Resistivity	Conductivity
$50 \text{ k}\Omega\text{-cm}$	20 μS/cm
200 k $\Omega$ -cm	5 μS/cm
$500 \text{ k}\Omega\text{-cm}$	2 μS/cm
1 M $\Omega$ -cm	1 μS/cm
$2~\text{M}\Omega\text{-cm}$	0.5 μS/cm



120V Transformer

### **BioFouling Timer**

The Pure Light includes a selectable timer that indicates the elapse of 90 or 180 days since the last servicing which can signal the need for regeneration to avoid risk of biofouling ion exchange resin. A time-out indication is distinguishing from low water quality by flashing the red LED. The timer is enabled and reset with a pushbutton and the time limit is selected by a jumper position. Elapsed time is retained in memory on power loss.

#### **Dual Mounting Threads**

The standard Pure Light is supplied with two mounting threads of 1/2" NPT and 9/16"-12 for convenience and reduced inventory.

#### **Multiple lights - One Transformer**

One, two or three Pure Lights may be operated from one 120V transformer which has screw terminals. Only one electrical outlet is required to monitor multiple points. Each light for 120V is supplied with a 10 ft (3 m) connecting wire, which may be user extended by splicing on additional 2 wire cable. Pure Lights with 230V transformers have integral 6 foot connecting wire and must be used singly.

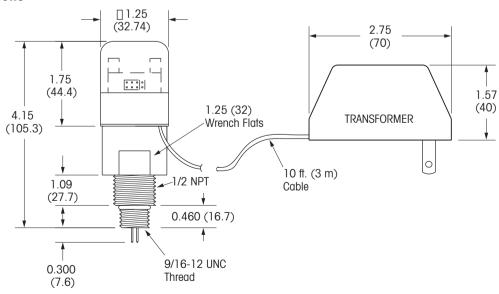
#### Red & Green LED's

For reliability, two bright Light Emitting Diodes (LED's) are used to indicate above or below threshold status, representing the need for regeneration or replacement of ion exchange resin.

#### **Specifications**

Accuracy	± 10% at 25° C, typical
Threshold settings	
Resistivity	50 k, 200 k, 500 k, 1 M & 2 MΩ-cm
Conductivity	20, 5, 2, 1 & 0.5 μS/cm
Visual Indication	Continuous green = Satisfactory water quality and operation within time limit Continuous red = Unacceptable water quality
	Flashing red = Time limit (90 or 180 days) exceeded, satisfactory water quality
Power requirement	115 VAC $\pm$ 10% 50/60 Hz, 230 VAC $\pm$ 10% 50/60 Hz, or 6 VAC 50/60 Hz Timer elapsed time is retained in memory on power loss
Installation fittings	1/2" NPT & 9/16"-12
Operating pressure	0-150 psi (10 bar)
Operating temperature	+5 °C to + 45 °C (Measurement is not temperature compensated)
Storage temperature	-40 °C to + 50 °C
Materials	Noryl SE100X body, gold-plated electrodes, Viton o-ring, Lexan 121 cover
Weight	Light and transformer - 0.9 lbs (0.4 kg)
Rating	120 VAC transformer cULus listed (Canadian and US standards) 230 VAC transformer, CE compliant, European round pin plug

#### **Dimensions**



## **Ordering Information**

Description	Part No.
Pure Light with 120 VAC Transformer	58 001 031
Pure Light without Transformer	58 001 030
Pure Light with 230 VAC Transfomer	58 001 032

Accessory	Part No.
120 V Transformer (36143)	58 073 050

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