



WATER LEVEL MEASUREMENT

WATER LEVEL MEASUREMENT AND INDICATION FOR THE STEAM POWER INDUSTRY

Aquarian 3000 Visual Bi-Colour Gauge Illuminator Series 2 and Display

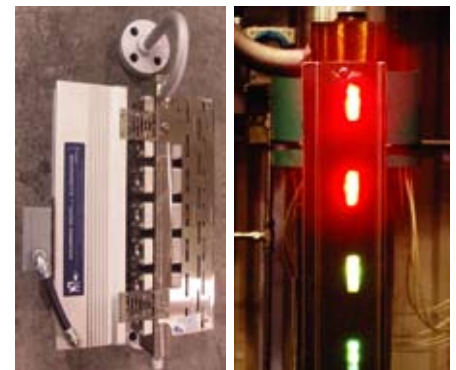
The Aquarian 3000 Visual is a high pressure ported water level gauge used to measure the water level in high-pressure boiler steam drums. The ASME Boiler and Pressure Vessel Code states that “ported gages or end-connected strip gages, shall be equipped to afford obvious visual discrimination between the appearance of water or vapor in the individual sections.” The Solid State Bi-Colour Gauge Illuminator and Display attach to the 3000 psi ported gauge to produce a red or green image on the display. A red image indicates that steam is present and a green image indicates that water is present. The red/green image is produced by an array of solid-state light emitting diodes (LED’s) and precision lenses that focus the image through the gauge body onto the display. The LED’s replace the unfocused incandescent light bulb and colored glass that are currently used in conventional bi-colour illuminators.

The LED arrays and precision Plano-convex lens provide a bright, clear and unmistakable image in the presence of steam and water. The high intensity narrow beam LED’s are mounted on an electronic printed circuit board with current limiting resistors. A precision 24VDC power supply provides the Illuminator with the exact current that is required for a constant clean image.



FEATURES

- All stainless steel and aluminum construction provides corrosion resistance and long service life
- LED’s are immune to failure from vibration
- Extremely efficient; converts virtually all energy into light, reducing power consumption and costs. Only 0.5 watts per port
- Average LED life is 11 years, resulting in reduced maintenance and service costs
- Absence of fragile colored glass prevents unnecessary repairs
- Display and Illuminator can be installed on either side of the gauge to provide viewing flexibility
- Side vents for internal cooling
- Indoor or outdoor installations rated NEMA 4X
- Adjustable end plate for exact placement of viewing screen, providing an unmistakable image
- Easily removed for gauge port inspection or repair
- Illuminator and display are extremely light weight and compact
- Illuminator power supply can utilize voltage of either 120 or 240VAC
- 6 LED’s per port produce extremely bright image, visible at more than 100 ft away
- Level Display enables operator to easily view image without standing at a precise spot



HALF FULL GAUGE, ILLUMINATOR AND DISPLAY ASSEMBLY

Controlling
the **power**
of **steam**

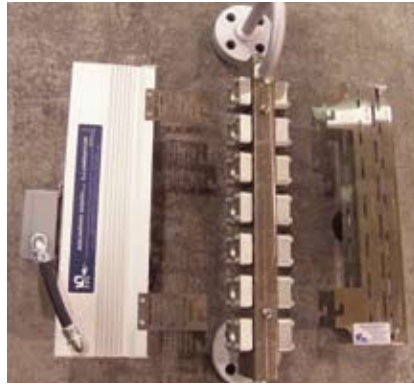
Aquarian 3000Visual Bi-Colour Gauge Illuminator and Display

OPTIONS

- Display hood, for increased visibility of display in bright sunlight
- Mirror or closed circuit TV for remote viewing

ORDERING

Use Fossil form 9340-1206 to list the particular equipment design specifications, configuration, and options



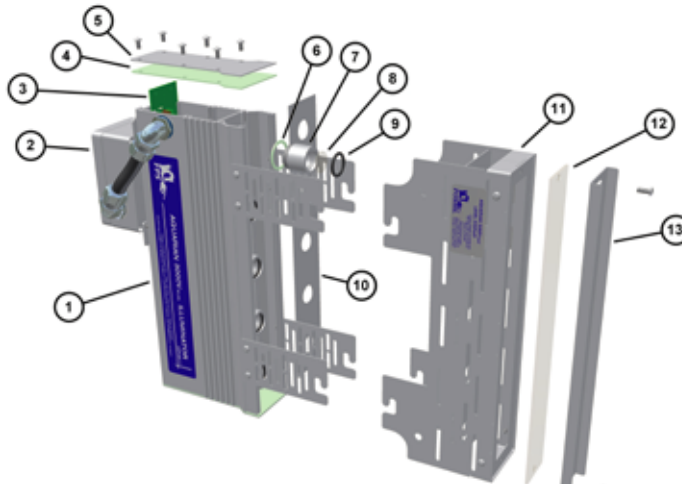
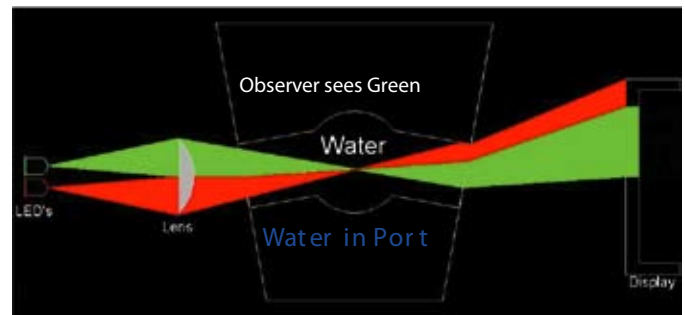
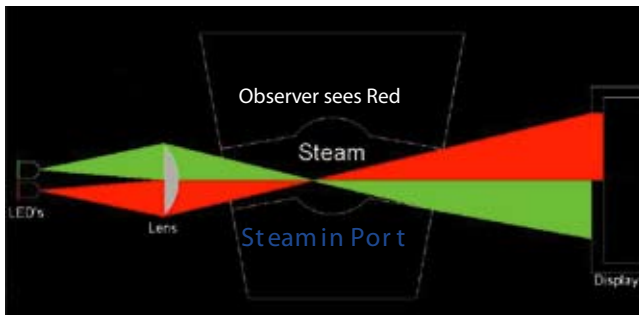
STANDARD BI-COLOUR GAUGE ILLUMINATOR SYSTEM

A small power supply (120 or 240 VAC input) in a NEMA 4X enclosure is provided with each Illuminator

**U.S. Patent NO.'s: 6,938,477;
7,197,926; 7,213,457**

Canada Patent No.: 2,465,601
Europe, Japan and China Patent Pending

BI-COLOUR GAUGE OPERATION



1	Illuminator Cabinet
2	Power Supply
3	LED PCB
4	Gasket
5	Cover
6	Lens Gasket
7	Lens Holder
8	Lens
9	O-ring
10	Heat Divider
11	Display Cabinet
12	Display Window
13	Adjustable End Plate

* American Society of Mechanical Engineers

The manufacturer reserves the right to change the designs and materials of its products without notice.

Distributed by:



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