

# STEP INTO THE MODERN ERA OF BREWING

# Introducing the AccuBrew Fermentation Monitoring System

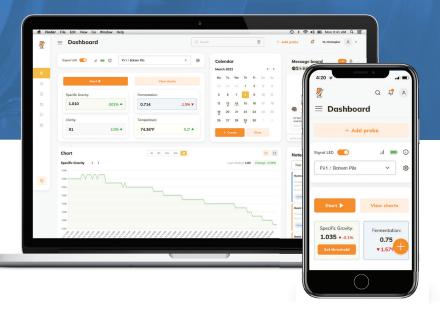
From Gulf Photonics

## Monitor Your Brews From Anywhere.

AccuBrew helps brewers just like you turn tanks faster and provides the most valuable insights from inside the tank, which prevents costly mistakes and ruined batches.

# ACCESS YOUR REAL-TIME DATA **24/7**







**AccuBrew** is an analytical tool that provides brewers with the data required to stay competitive, react quickly to anomalies, and operate efficiently.



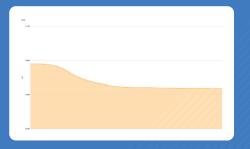
Specific Gravity and Temperature alerts, and quick comparison of batches provides peace of mind.



AccuBrew was designed with breweries and brewers in mind, from the robust sensor package to the intuitive user interface.



Continuous improvement requires consistent results; consistent results require good communication, documentation, and data. **AccuBrew** delivers and protects that information and helps teams communicate effectively, and continuously improve.



# The Specific Gravity Profile

A visible record of the SG measurements taken during fermentation. As fermentation progresses, the SG profile trends downward over time. Brewers will use the SG profile along with the Fermentation Activity and Clarity profiles to confirm fermentation is progressing as expected, or is in danger of stalling, and to decide when to initiate rests or make additions. The SG profile will appear relatively smooth.



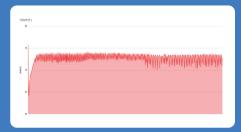
## **The Fermentation Profile**

A relative record of the total sugars in solution, both fermentable and non-fermentable. Sugars absorb blue light. As fermentation proceeds, the amount of blue light returning to the sensor increases as the amount of all sugars in the tank decreases and less blue light is absorbed. The Fermentation Activity Profile trends downward over time as fermentation progresses. The Fermentation Activity Profile will appear much more dynamic than the SG Profile.



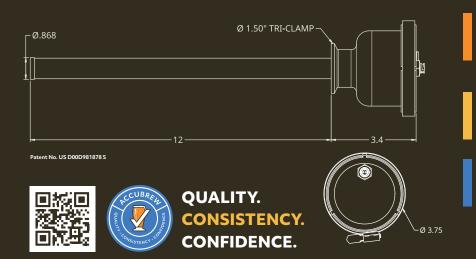
## **The Clarity Profile**

A relative record of the number of particles in front of the sensor. Peaks indicate higher concentrations of particulates in front of the detector window. Valleys indicate lower concentrations as yeast, hop particles, and other solids introduced by the addition of cocoa nibs, etc. drop out of suspension and clarity improves. Striations in the wort may also create peaks and valleys as they pass in front of the sensor. The Clarity Profile trends down over time as particles drop out of suspension. The Clarity Profile will also appear more dynamic than the SG Profile.



#### **The Temperature Profile**

An absolute record of the temperature recorded by the sensor. After the temperature stabilizes, the temperature graph will take on a sawtooth pattern as it records the normal temperature fluctuations in the tank as the glycol system cycles on and off.



The AccuBrew sensor begins with a robust maintenance free stainless steel, CIP ready housing. The housing contains all of the electronics, comprising the sensor PCB, the control and communication PCB, the temperature sensor, and backup battery.

The IoT sensor mounts through a standard 1.5" port. Thanks to the length of the sensor, it can be installed through a sanitary T-fitting into tanks without a spare port. In this way the sensor and sample valve can be mounted to a single port.

The AccuBrew sensor is powered by a low voltage DC adapter connected to the sensor's IP69K rated fitting by a 10-meter food grade cord. The adapter and threaded connector makes it easy to move the sensor from tank to tank. If needed, AccuBrew also provides a low power adapter for hardwired installations. AccuBrew adapters require a 60 Hz, 110 VAC supply.