



CLEAR2THERE BIN MONITORING SOLUTIONS

LEVERAGE CLEAR2THERE SMART FARM TECHNOLOGY FOR THE EFFICIENT MONITORING AND MANAGEMENT OF GRAIN BINS

CLEAR2THERE & BINMASTER SOLUTIONS

Clear2there is proud to partner with BinMaster, the leading provider of reliable, solid-state point and continuous bin level indicator and control systems.



BinMaster's SmartBob grain bin level sensors seamlessly integrate with Clear2there's comprehensive smart-farm monitoring and control solutions using the Clear2there Viewbiquity Cloud Application Suite (VCAS) service platform.

Smart-farm services made possible through the Clear2there Viewbiquity platform incorporate farm-centric sensors such as the SmartBob devices, as well as more traditional automation devices and sensors, including:

- Electronic locks
- Door and window sensors
- Smart power management devices
- Motion sensors
- Environmental sensors and thermostats
- Video surveillance equipment

The smart-farm solution from Clear2there supports a wide range of standard communication protocols, including Modbus, Z-Wave, ZigBee and TCPIP. VCAS not only integrates multiple sensor types, but the cloud-based element of the solution also enables access and control from any internet-connected smartphone, tablet or computer.

THE FUTURE OF BIN MANAGEMENT

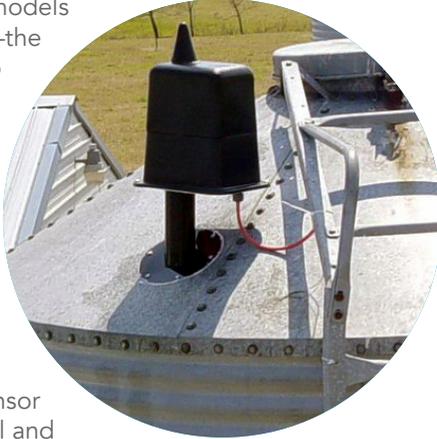
Automated grain bin monitors measure the height of grain in the bin and calculate the remaining capacity. Without this type of measurement capability, a farmer must often climb the ladder to the top of the bin and visually check on the levels of grain. Injuries sustained from falls—both from grain bin ladders or into the bins themselves—are virtually eliminated using this technology.

The level of each bin is displayed graphically in the Viewbiquity application. In addition, using the rules feature, an immediate notification can be sent if bin levels change unexpectedly—such as if a theft is underway. With bins often located in unattended areas, this capability has critical value.



SIMPLE TO DEPLOY BIN SENSORS

BinMaster offers two models of SmartBob sensors—the SmartBob2 for bins up to 180 feet tall, and the SmartBob-TS1 for bins up to 60 feet tall. The SmartBob-TS1 is compatible with the SmartBob2, allowing the two sensors to be combined as part of a common system.



The SmartBob-TS1 sensor delivers an economical and compact bin monitoring system specifically designed for use in smaller tanks and silos. Small but powerful, the SmartBob-TS1 can handle the demands of virtually any application and vessel type.



The SmartBob2 remote is the core component of a proven, reliable level measurement system using cable-based sensing technology. When combined with the Clear2there VCAS platform, SmartBob2 offers the strongest and smartest cable-based inventory measurement system on the market today—with the ability to manage from one up to 128 bins of heights up to 180 feet.

The SmartBob sensors work by dropping a cable with a weighted probe to the surface of the grain in the bin. When the probe comes into contact with the grain, it automatically retracts and sends a measurement that can be accessed from your internet-connected personal computer, smart phone or tablet device. The SmartBob sensors can be set up to take measurements at scheduled time intervals throughout the day or on demand whenever a reading is needed.

The sensors install on the top of a bin, mounted about one-sixth of the distance from the outer bin perimeter, which provides the best level of accuracy for center-filled bins. They are easy to install through a three-inch hole in the bin roof using a mounting plate that keeps the SmartBob sensor level on an angled roof.

Once the sensors are wired for power, you can be done with inefficient and dangerous methods of bin level monitoring and begin taking accurate, automated measurements, including:

- Distance to the grain (headroom), indicating how much bin room remains
- Height of the grain from the bottom of the bin
- Percentage full based upon the bin's height and diameter
- Conversion to the number of bushels in the bin

A SMART INVESTMENT FOR YOUR FARM

As farming operations grow in size and complexity, more farmers are storing grain in large bins on their own property, rather than taking it to area feed mills. A grain bin monitoring system from Clear2there can track not only product levels, but also temperature and humidity. Monitoring temperature and moisture content during the drying process can help to control energy consumption by delivering notifications when target levels are achieved. This can also prevent over-drying that can reduce the value of the grain at market.

Along with grain bin monitoring, there are multiple other Clear2there smart farm applications that meet the critical needs of many different types of agricultural functions. The VCAS platform supports feed and water supply sensors, monitors and controllers for livestock feeding operations, pivot irrigation monitoring and management systems, temperature and airflow sensors for poultry and hog confinements, and industrial controllers that can operate ventilation fans, louvers, and curtains. In addition, the system can monitor and provide alerts regarding power utilization, water flow and use, and emergency back-up generator testing and status.

Clear2there delivers innovative technology solutions that elevate the operational efficiency of modern agricultural enterprises. Contact us today for more information on Clear2there solutions for your farming operations.



CLEAR2THERE
2904 West 10th Street
Sioux Falls, SD 57104

Tel: 888.201.7075
Email: info@clear2there.com
Web: www.clear2there.com