LEVEL SENSOR

Achieving customers

河北湃溶科技有限公司

HEBEI PROKEY TECHNOLOGY CO.,LTD

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ABOUT US

PROKEY

2011

Achieves growth of both enterprise value and customer value.

PROKEY Technologies Co., Ltd., founded in 2011, is dedicated to R&D, manufacturing and sales of industrial automation control products. Relying on high - quality, high - performance automation control products and solutions to create maximum value for customers, determined to become the world's leading industrial automation solutions supplier.

PROKEY built long - term partnerships with customers.

To achieve this, PROKEY offers more than just products: working with PROKEY gives customers access to leading integrated manufacturing and R&D facilities, as well as highly skilled engineering and industry specialists.

专业性科技创新 | 引领最前沿物位设备

Technological innovation | Leading the forefront of
LEVEL SENSOR

LEVEL SENSOR

The Importance of Level Measurement

In modern industrial production and warehouse management, accurately grasping the inventory of materials plays a crucial role in the control of enterprise operating costs, the arrangement of production plans, and the efficient operation of the supply chain.


Industry Pain Points and Demands

Low measurement efficiency: The traditional manual measurement method is time - consuming and labor - intensive with low efficiency. Measurement personnel need to frequently enter and exit the warehouse and shuttle among various goods, increasing labor costs.

Large measurement errors: Manual measurement is prone to large errors due to negligence, affecting the accuracy of inventory data. Especially in complex warehouse environments such as high - dust and low - light conditions, the measurement difficulty is further increased.

Inability to monitor in real - time: It is difficult to monitor inventory changes in real - time, and enterprises cannot replenish or allocate materials in a timely manner, which is likely to lead to material shortages or inventory backlogs, seriously affecting the capital turnover and operational efficiency of enterprises.

Product Introduction
LEVEL SENSOR
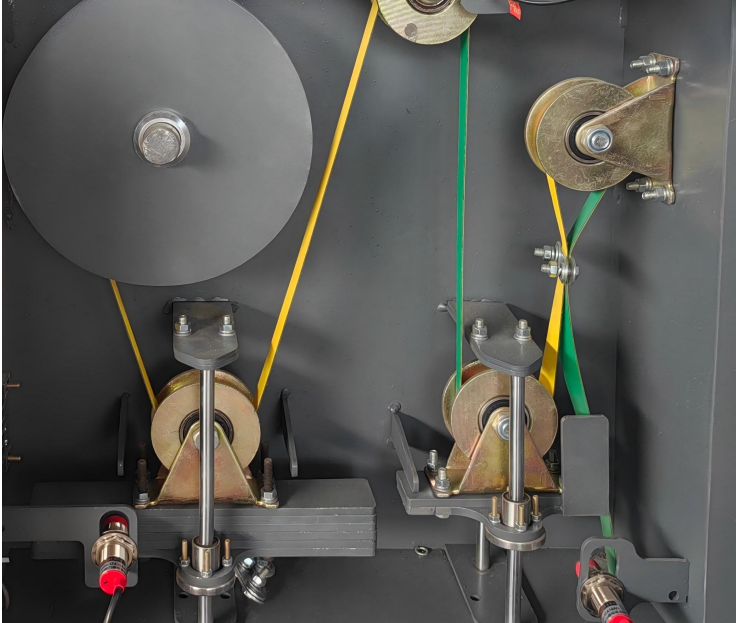
A level sensor is a device used to detect the height of materials in closed or open containers during industrial production processes.

It is widely applied in industrial automated production, warehouse management, and other fields. It can convert level signals into electrical signals, digital signals, etc., which are easy to process and transmit, providing the system with information on the material height to enable the monitoring, control, and management of the production process.

Working Principle

Level sensors are a classic level measurement tool whose operating principle is based on the up and down movement of a heavy weight inside a silo to measure the level height.

Specifically, the weight inside the level meter is driven by a motor to move up and down inside the silo. When the weight comes into contact with the surface of the material, its resistance changes. This change is converted into an electrical signal and transmitted to a control system. By processing and analysing the electrical signals, the control system accurately calculates the height of the material level and displays it in real time on the monitoring screen.
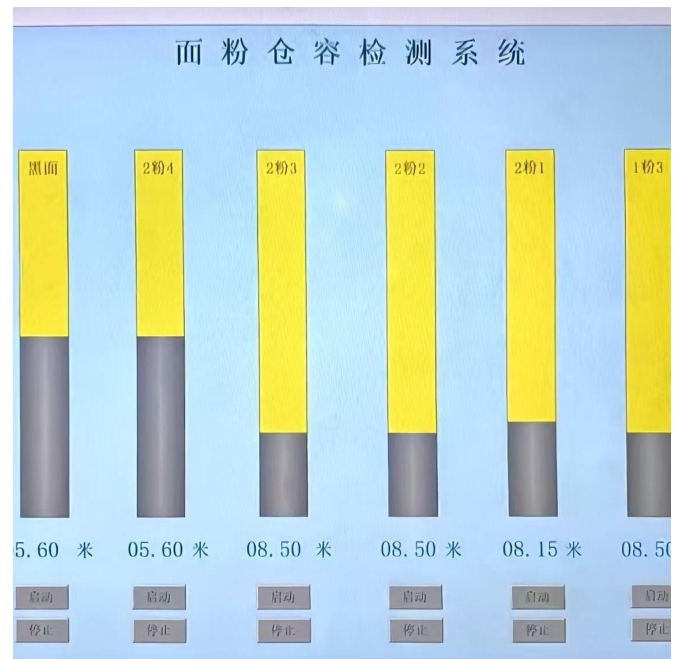
Parameters

Dimensions(X*Y*Z)	525*511*311MM
Supply voltage	AC380V
Power	0.18KW
Control system	Omron plc
Communication modes	Ethernet communication
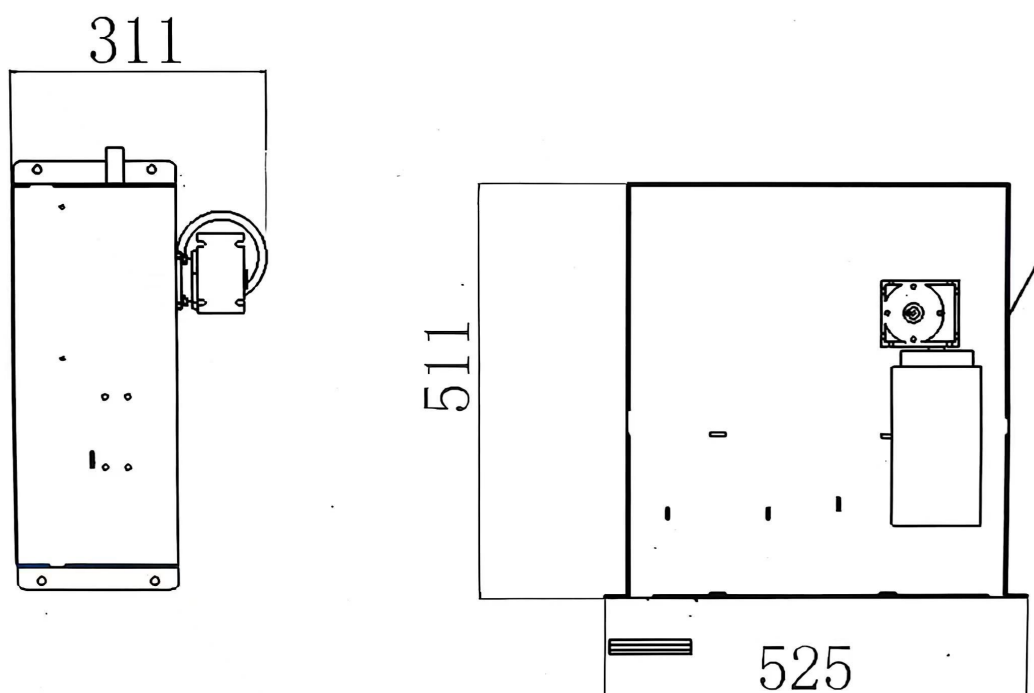
PRODUCT ADVANTAGES

The price is only 1/4 of that of radar sensors, but its accuracy is 10 times that of radar sensors, helping enterprises achieve high - precision level measurement at a lower cost.
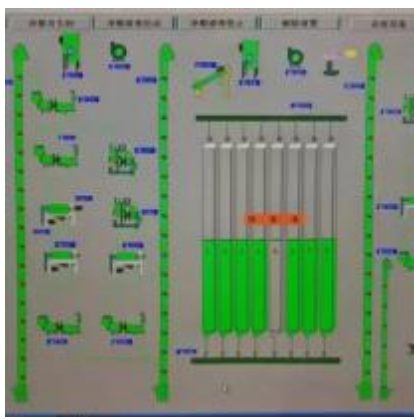

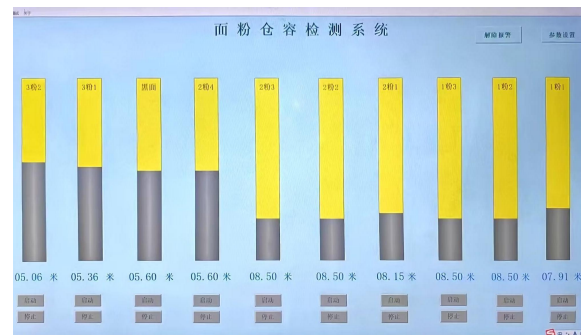High Efficiency

High Precision

Multifunction

Wide Range

Low Cost

Isochronous data:

It can measure the actual height inside the container in real - time. After being perfectly integrated with PLC, enterprise owners can clearly understand the actual storage capacity just by checking on the screen, realizing efficient management.

Working in harsh conditions:

It is not affected by dust and can work stably in complex storage environments with a lot of dust, ensuring measurement accuracy.

Intelligent reset:

After afault or power outage and power restoration, the machine will automatically return to its position, reducing manual intervention and improving work continuity.

Highly cost effective:

It is small in size and very simple to install. Installation can be completed without professional personnel, and it requires no maintenance in the later stage, reducing the operation and maintenance costs of enterprises.

APPLICATION

Unaffected by interferences under
various working conditions

Case Sharing flour mill

With its non-contact measurement and high-precision characteristics, level sensors have become key equipment for raw material warehouses, production links, and finished product warehousing in flour mills。

- **Raw material warehouse monitoring:**real-time measurement of the accumulation height of wheat, barley and other raw materials, replacing traditional sliding ruler measurement, significantly improving accuracy and reducing manual intervention.

- **Grinding link control:** installed at the inlet, adjust the feeding speed through real- time data, and improve the efficiency of the mill by more than 10%.

- **Finished product warehouse management:** monitor flour stocks, avoid backlogs or shortages, and optimize inventory management

- **Adapt to the dust environment** without being affected by changes in temperature and humidity.

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https://www.prokeyautomate.com