

Summary

Through this measurement, we can comprehensively understand the performance characteristics of the ultrasonic module, such as Ranging Distance, Measuring Angle, Accuracy and Precision. But we also need to pay attention to some of its shortcomings, such as data fluctuations during measurement and the potential adverse effects of the environment on the sensor. The main difficulty with the propagation of ultrasound in air is that the attenuation of by high-frequency ultrasound in air is high so that the range of these devices is relatively short. In conclusion, the measurement data of this module is accurate and the error is within an acceptable range, the ultrasonic sensor is a reliable sensor for detecting the distance between the object and the sensor.