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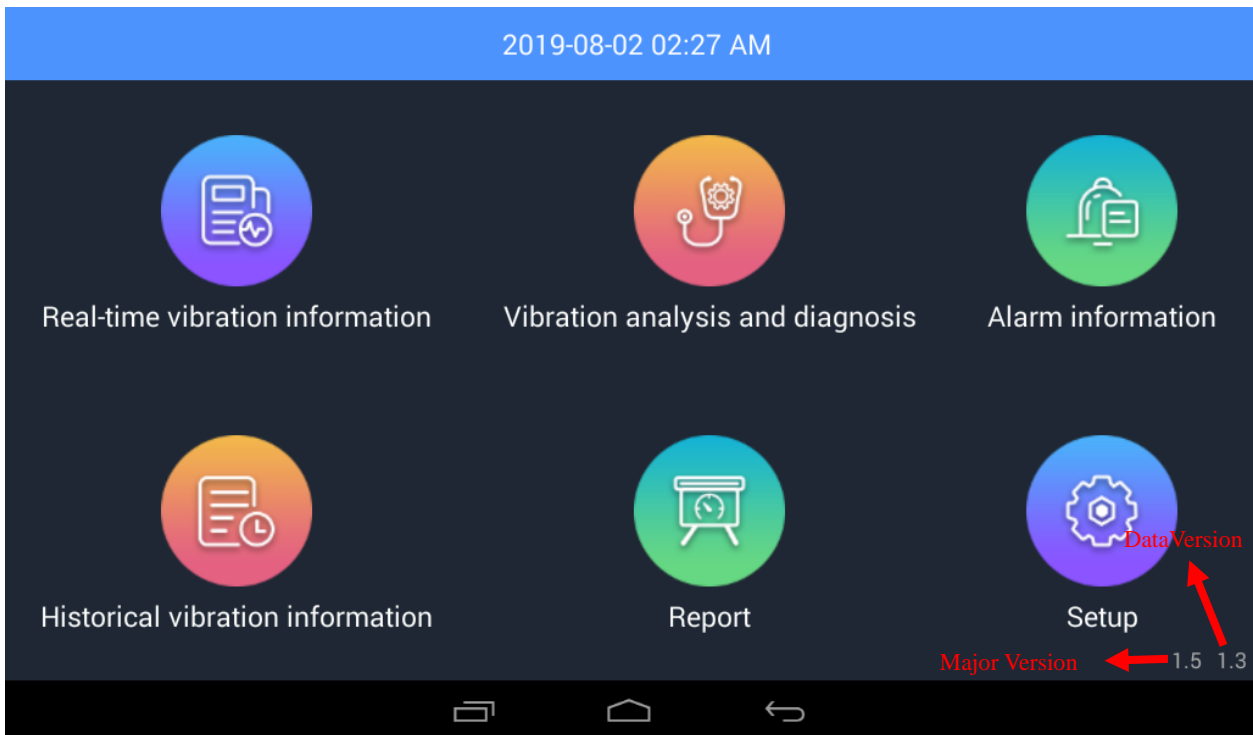
VB-900 User Manual

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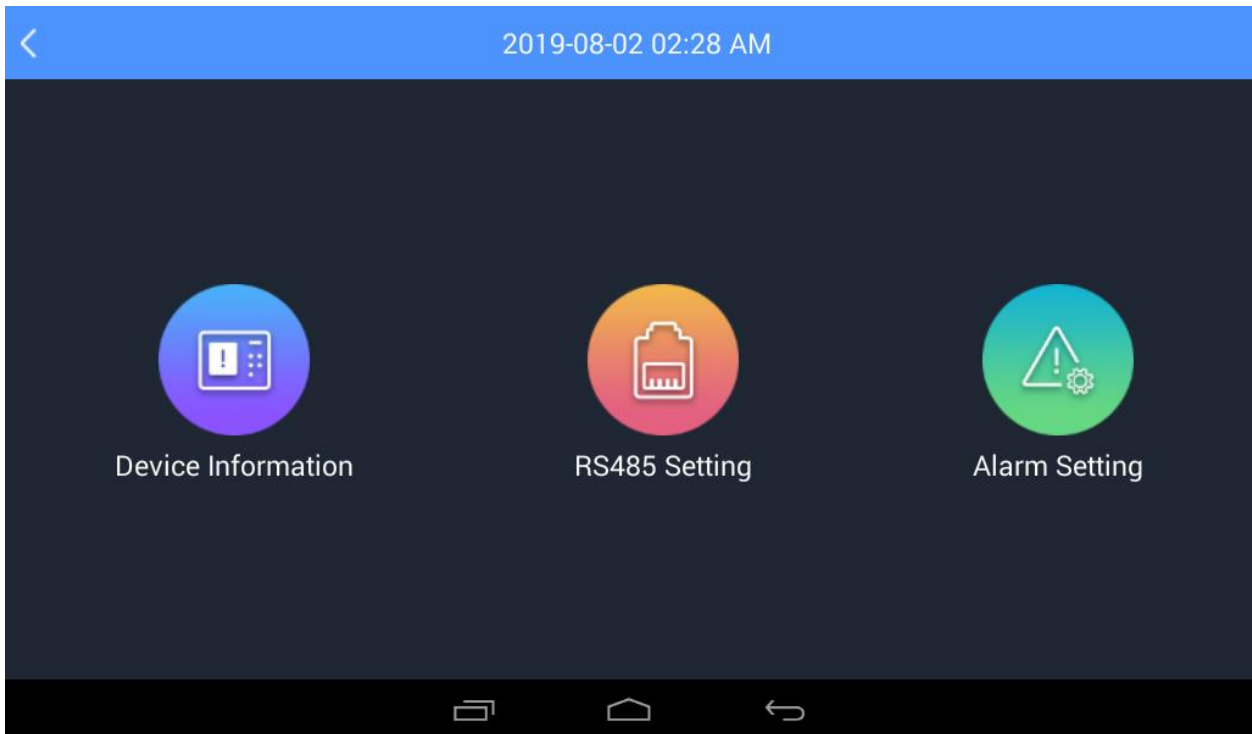
1. Introduction

This paper is a brief introduction to the operation of VB-900 system (hereinafter referred to as this system). This system is a vibration detection and analysis system which integrates data acquisition, data processing and data display of vibration gauge. The system has five core functions: Real-time vibration information, Vibration analysis and diagnosis, Alarm information, Historical vibration information and Report. The following chapters will give a brief description of these five functions to help users understand their usage.



2. Setup

Before using this system, basic settings should be made first.



- Device information setting



The basic information of the equipment can be set and saved, and the saved basic information can be directly used in the later diagnosis or report presentation.

- RS485 Setting

2019-08-06 01:24 AM

1st RS485 2nd RS485

Baud Rate :	115200
Name of Gauge :	0
Installation Location :	0
RS485 ID :	15
Software version :	0

Cancel
Save

Baud Rate should be maintained to fill in 115200, other information can be filled in according to the actual situation, then click to save (note that the software version is VB300 software version number, If you are not clear, you can leave it blank.).

- Alarm Setting

2019-08-02 02:29 AM

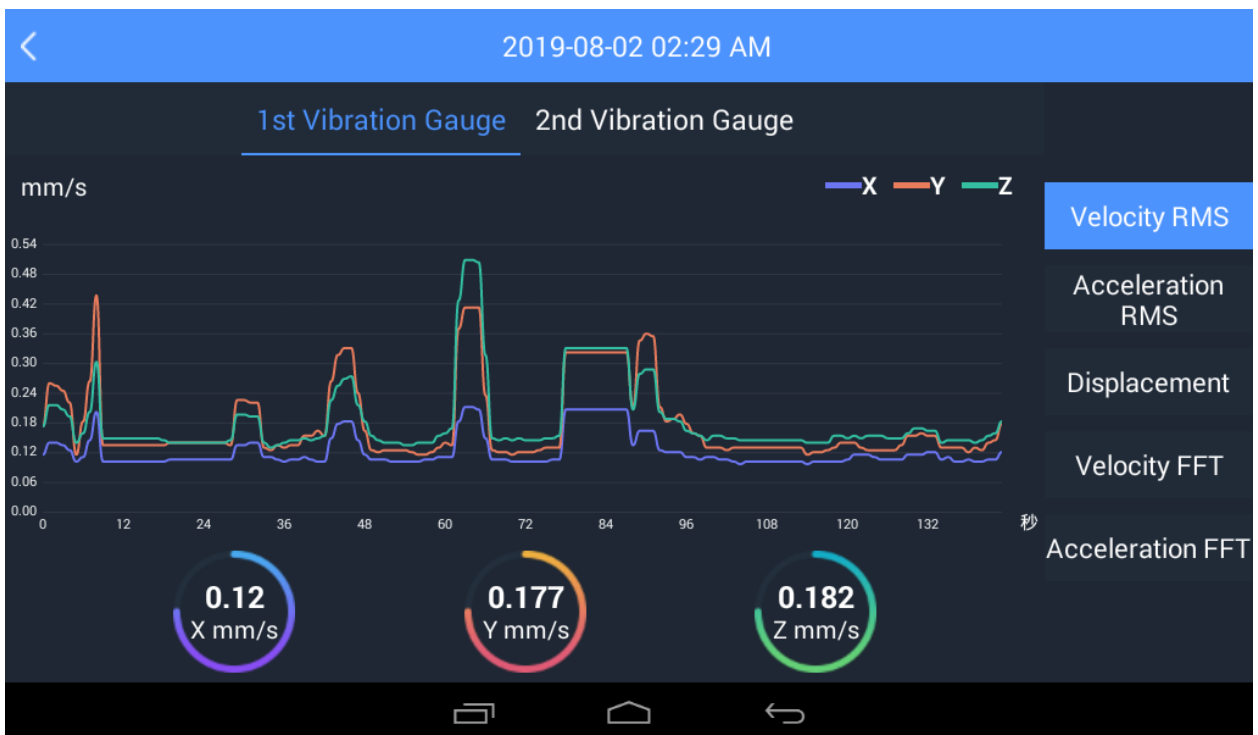
Velocity RMS pre-alarm value :	1	1	1
Velocity RMS alarm value :	100	10	50
Acceleration RMS pre-alarm value :	150	200	90
Acceleration RMS alarm value :	200	200	90
Displacement pre-alarm value :	1	1	1
Displacement RMS alarm value :	100	100	100

Cancel
Save

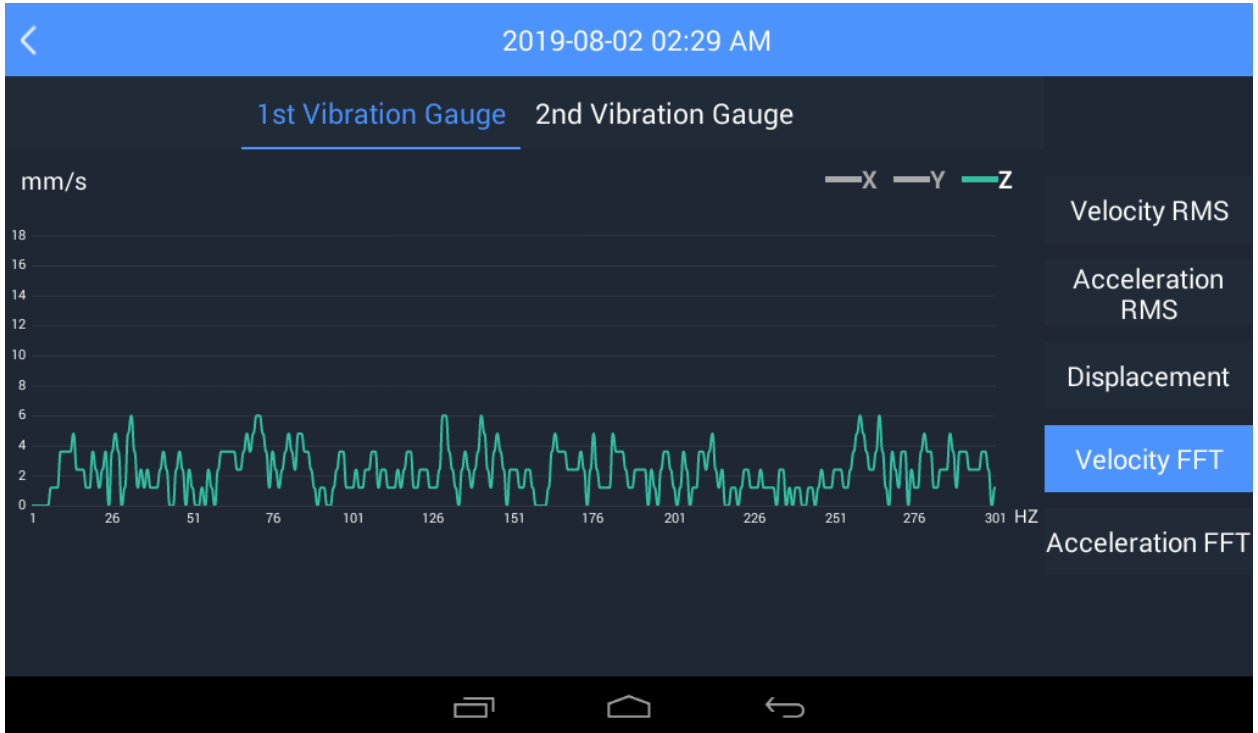
Three parameters, Velocity RMS, acceleration RMS, displacement alarm and pre-alarm value can be set. Each parameter can be filled in a set of (x, y, z) values. When the actual value exceeds the preset value and lasts for 1 minute, the alarm/early warning dialog box will prompt the user immediately.

3. Real-time Vibration Information

The Real-time vibration information page contains the real-time detection data of the vibration gauge with page access. There are five types of data, namely velocity RMS, acceleration RMS, displacement, velocity FFT and acceleration FFT. Each type of data contains three axes. Clicking on "X", "Y", "Z" can close or open the curve display of the relevant axes.

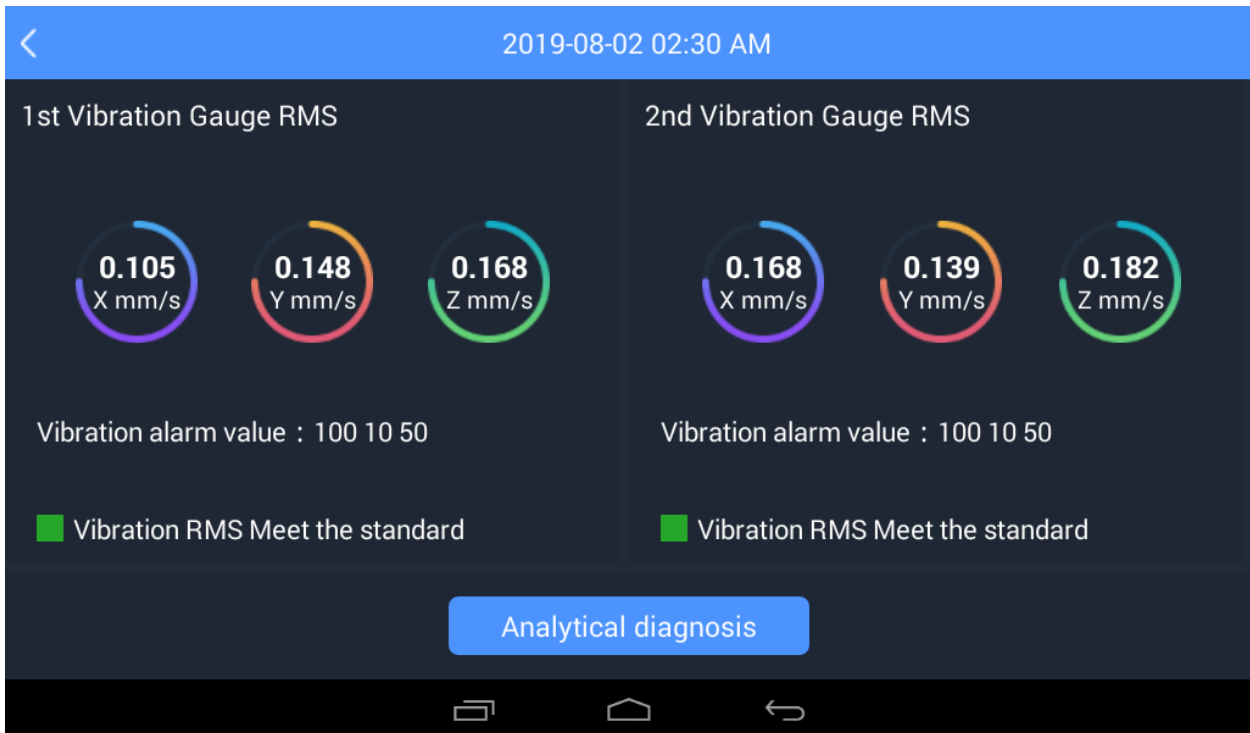


Note that Velocity FFT and acceleration FFT can display only one axis of data at the same time:

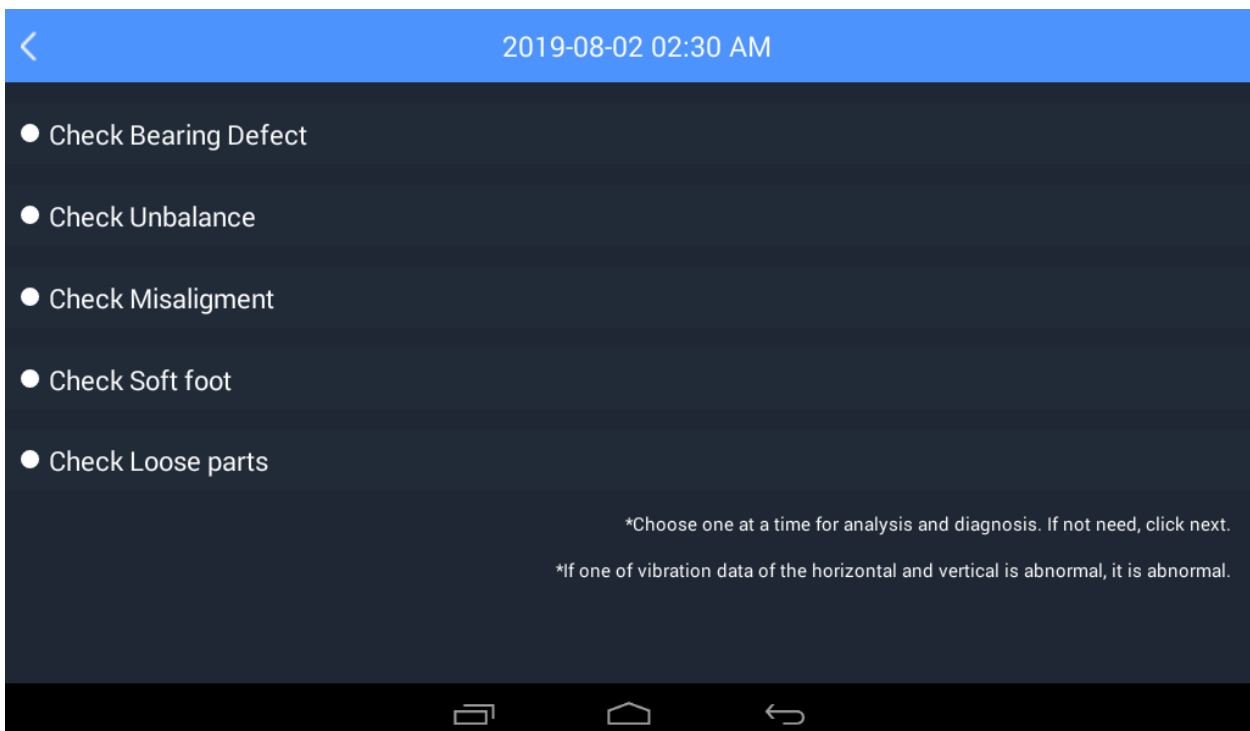


4. Vibration analysis and diagnosis

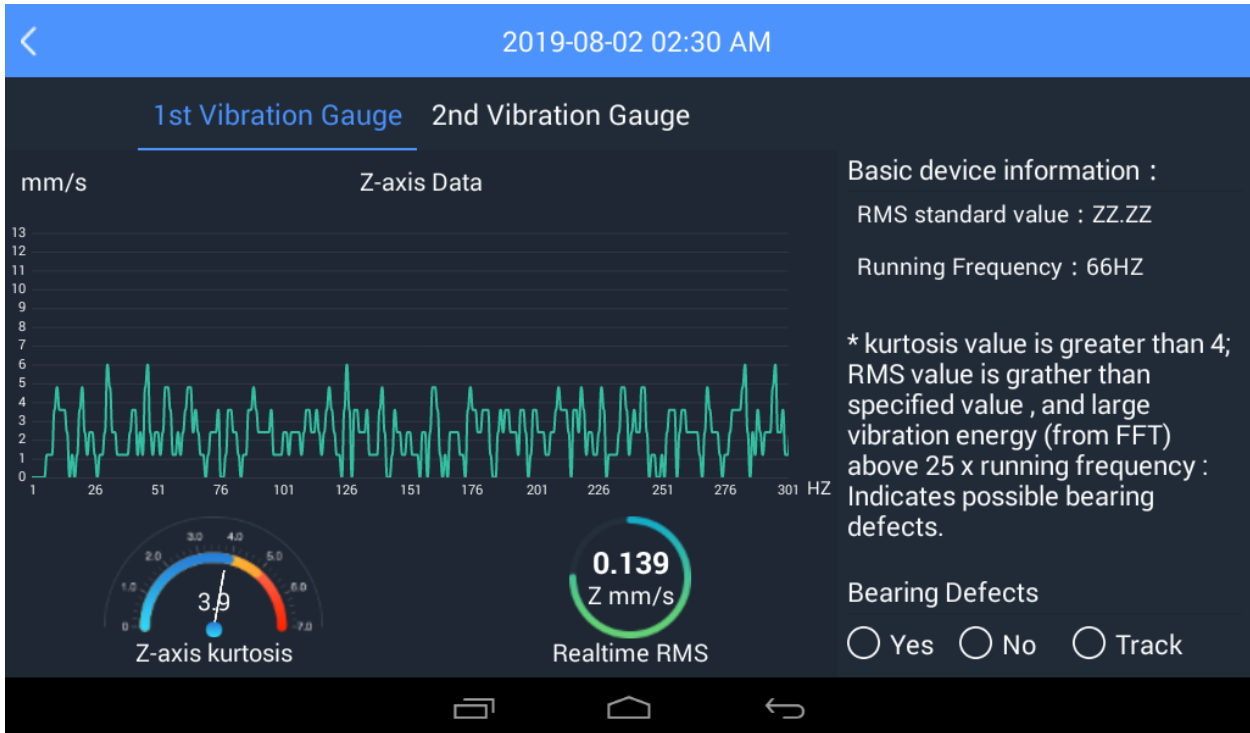
Real-time RMS information of vibration will be displayed after entering the function, and it will be refreshed automatically every 3 seconds.



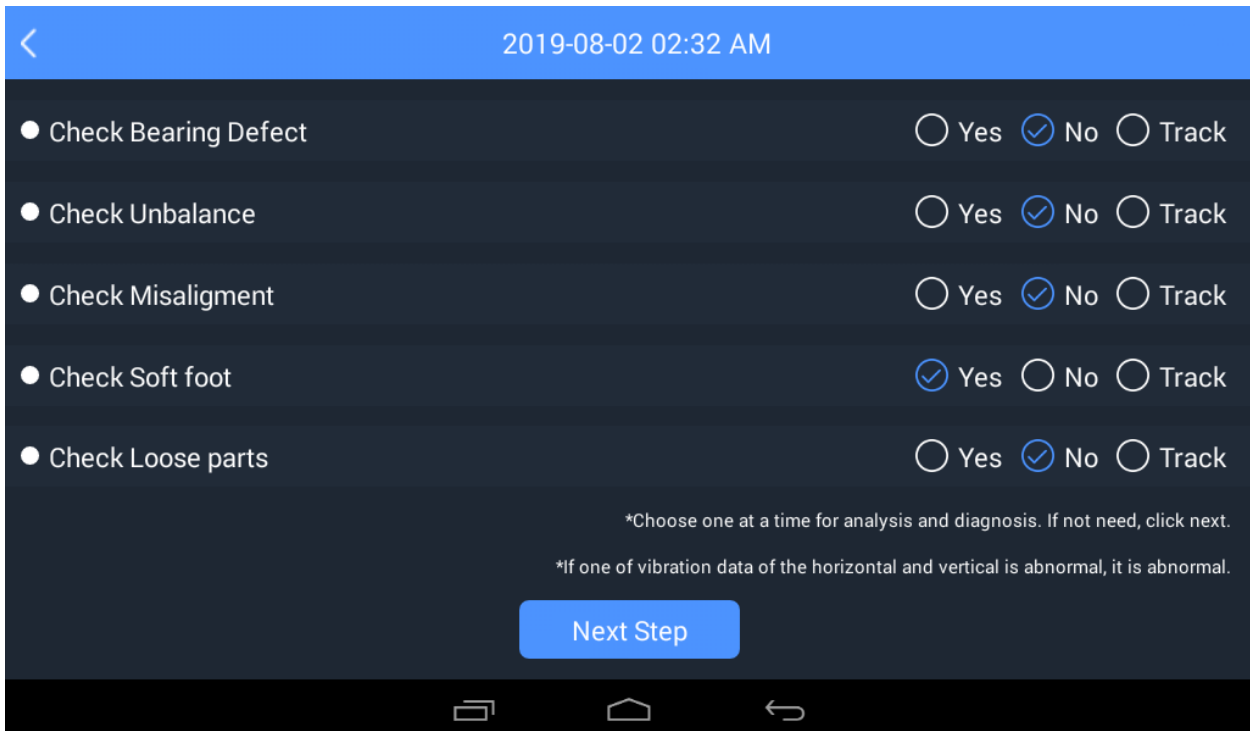
Click on the "Analysis diagnosis" button to start the diagnostic process:



Five abnormal diagnoses can be made. Click on a diagnosis to enter the relevant diagnostic page:



Users can choose whether to diagnose or not according to the data, or be included in the follow-up.



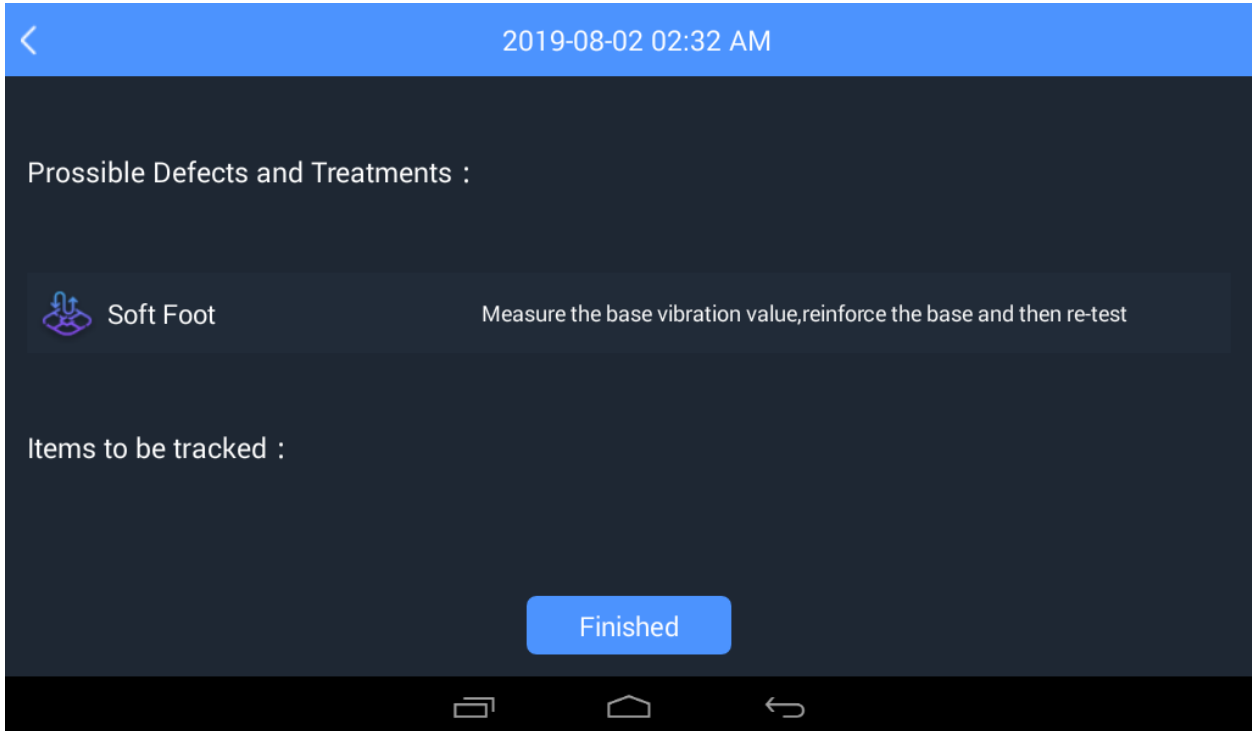
2019-08-02 02:32 AM

- Check Bearing Defect Yes No Track
- Check Unbalance Yes No Track
- Check Misalignment Yes No Track
- Check Soft foot Yes No Track
- Check Loose parts Yes No Track

*Choose one at a time for analysis and diagnosis. If not need, click next.
*If one of vibration data of the horizontal and vertical is abnormal, it is abnormal.

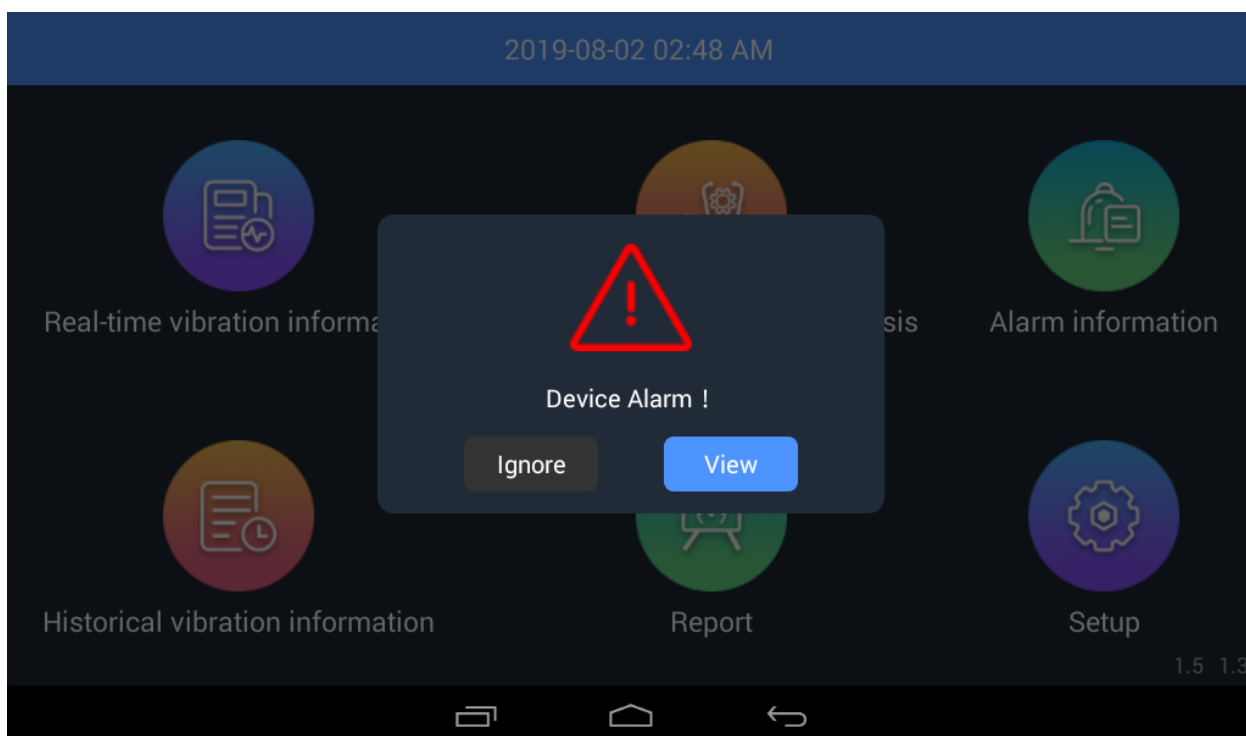
Next Step

After all diagnoses are completed, the system will automatically display the next button. The user can click the next button to display the final diagnostic results. Suggestions on how to deal with abnormal projects will be given:

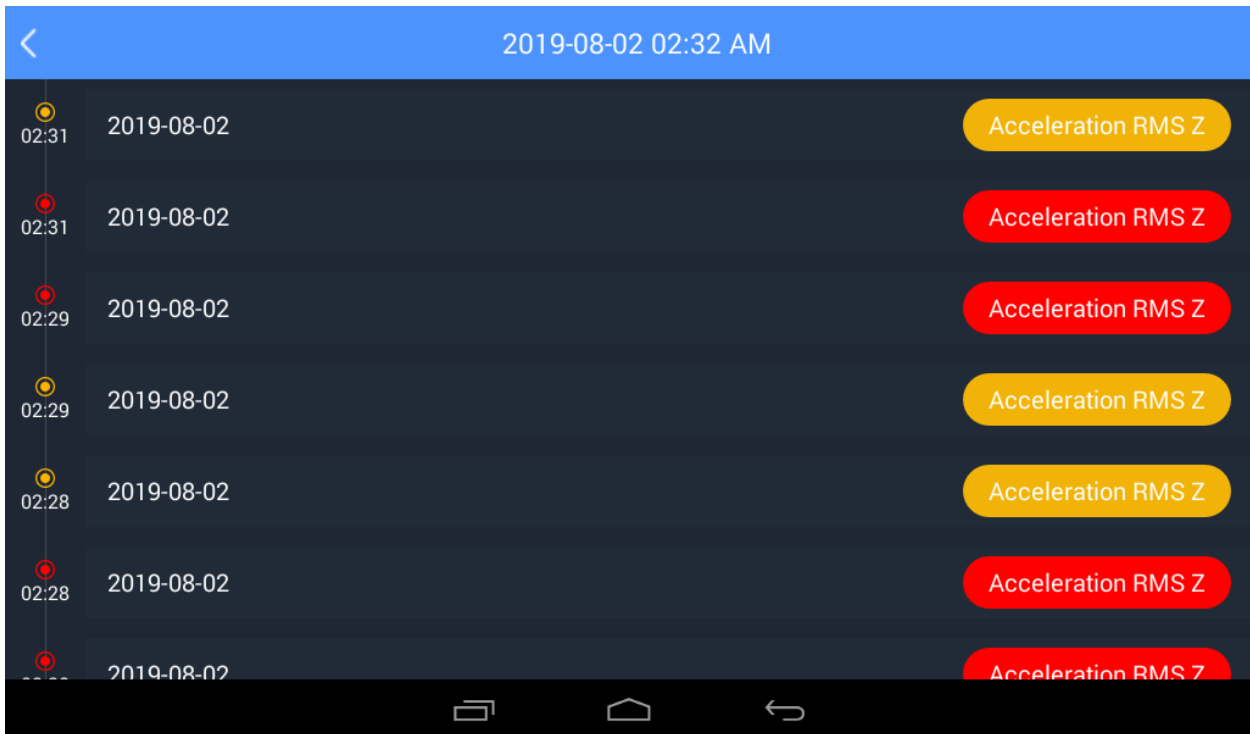


5. Alarm information

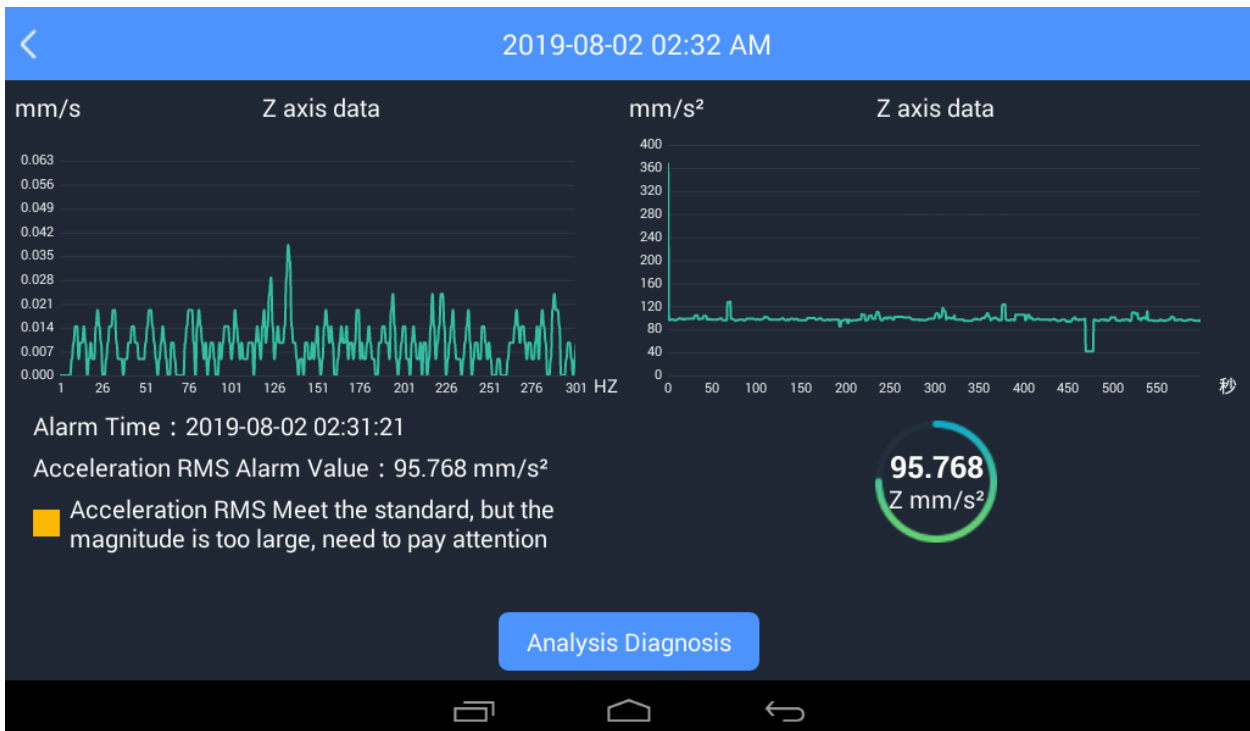
According to the alarm triggering conditions set by users, when there is an alarm/early warning trigger, the alarm/early warning box first pops up to prompt users:



Click View to enter the alarm information page:



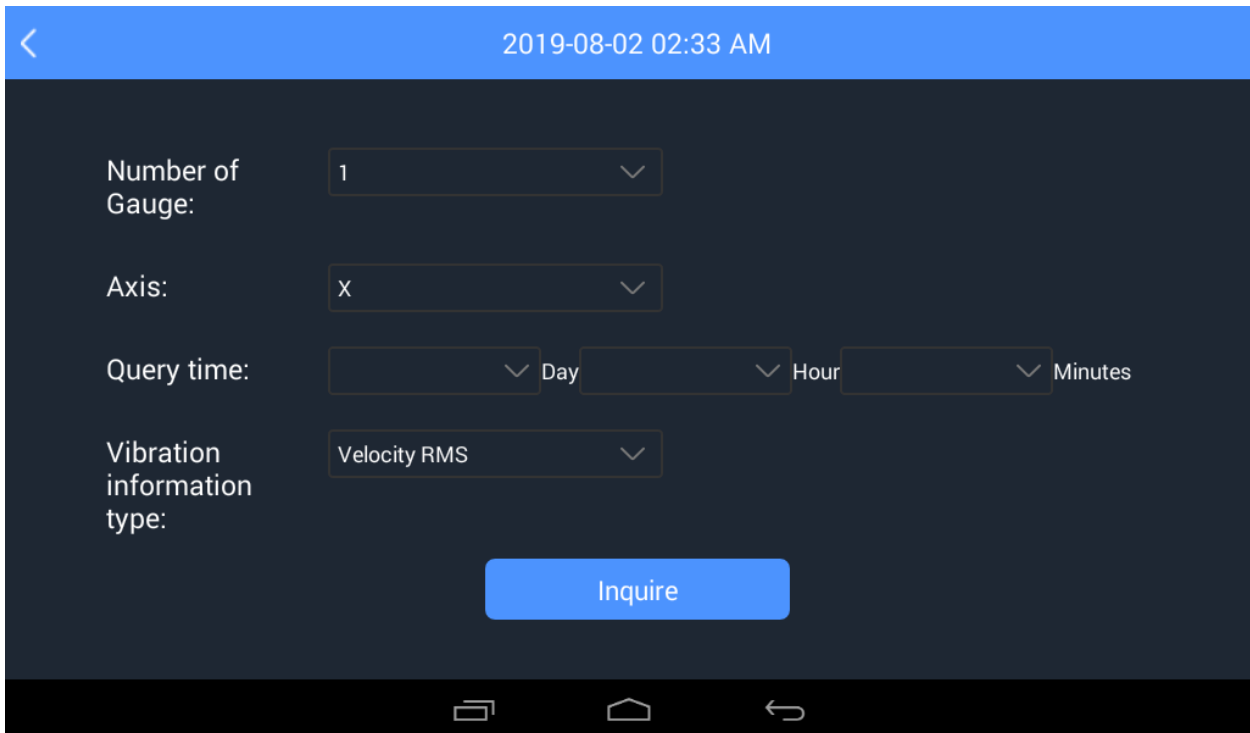
This page is sorted by time, the alarm is displayed in red and the warning is displayed in yellow. Click on an alarm record to view the FFT data of the axis and the first 600 seconds of the alarm trigger data type at the time of the alarm:



Click on Analytical Diagnosis to enter the relevant page of Chapter 4.

6. Historical Vibration Information

Users can query historical vibration information according to parameters such as vibration gauge number, axis, time, vibration information type, etc.



With regard to query time:

- Choose only days

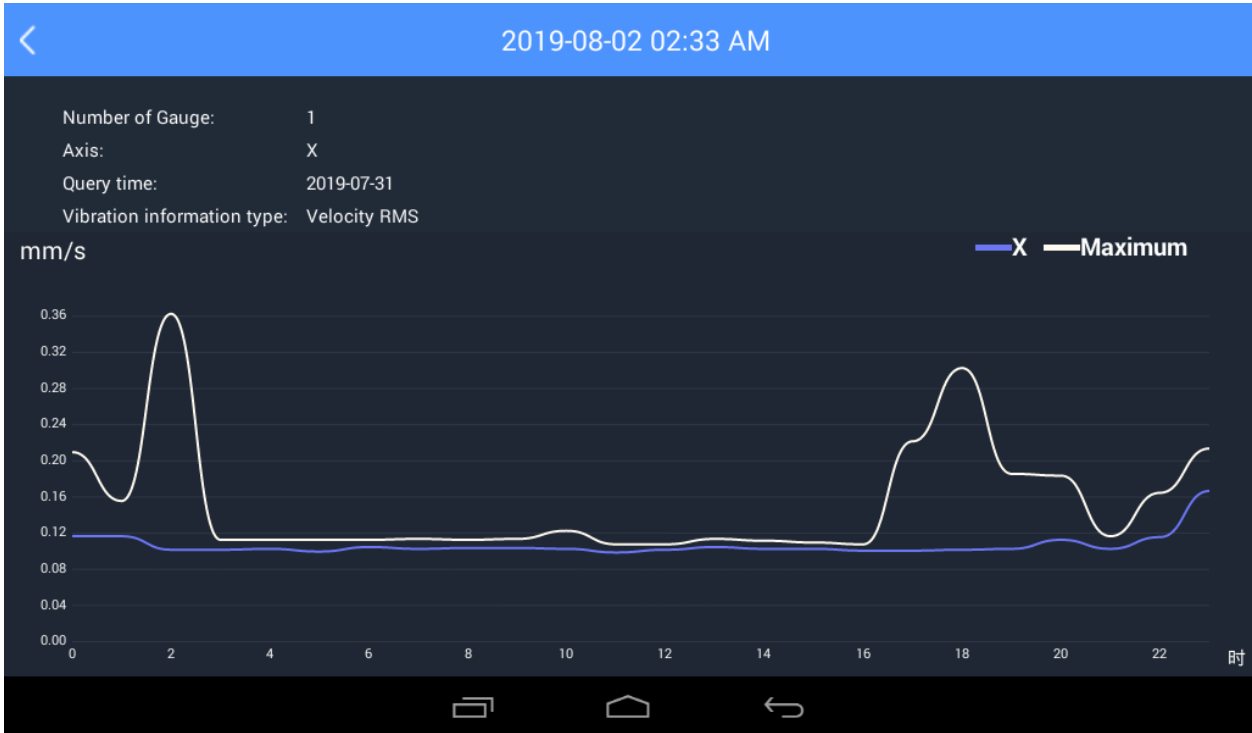
The query results show two curves of the average and maximum data per hour of the day.

- Choose only days and hours

The query results show the average and maximum curves per minute for that small piece of data on a given day.

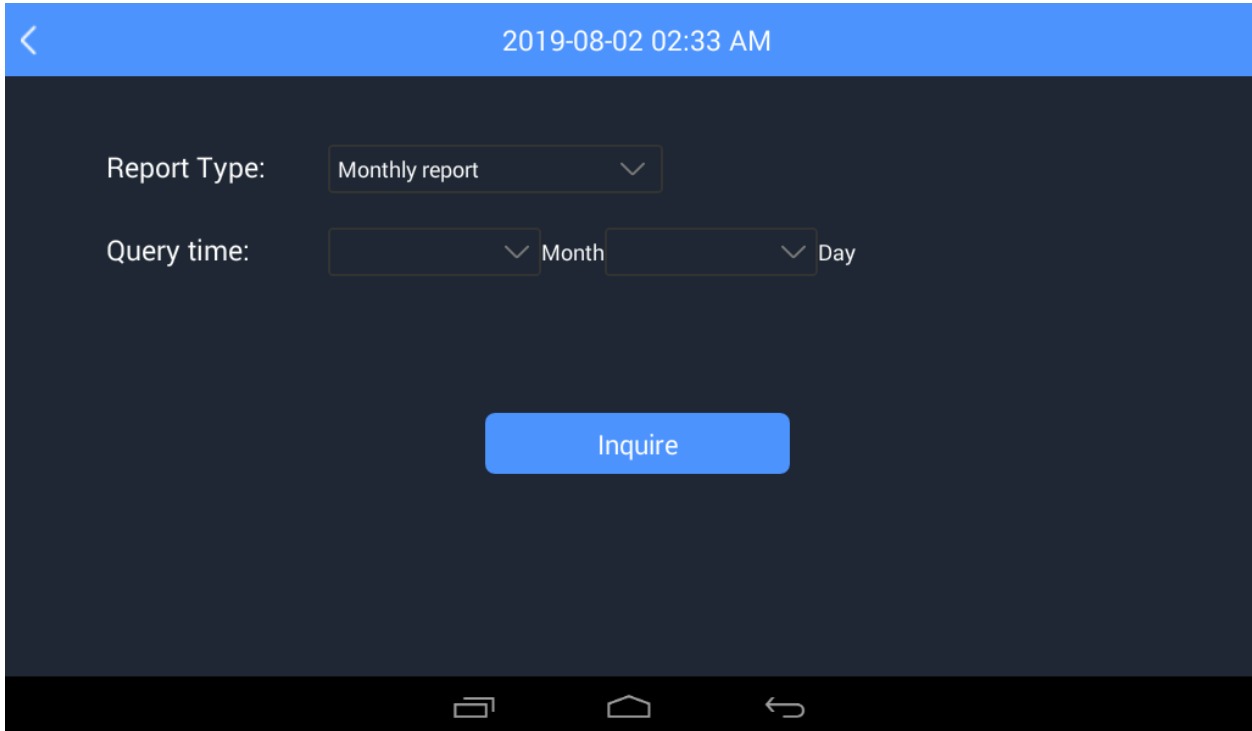
- Choose Days, Hours and Minutes

Query results show data curves per second for a minute

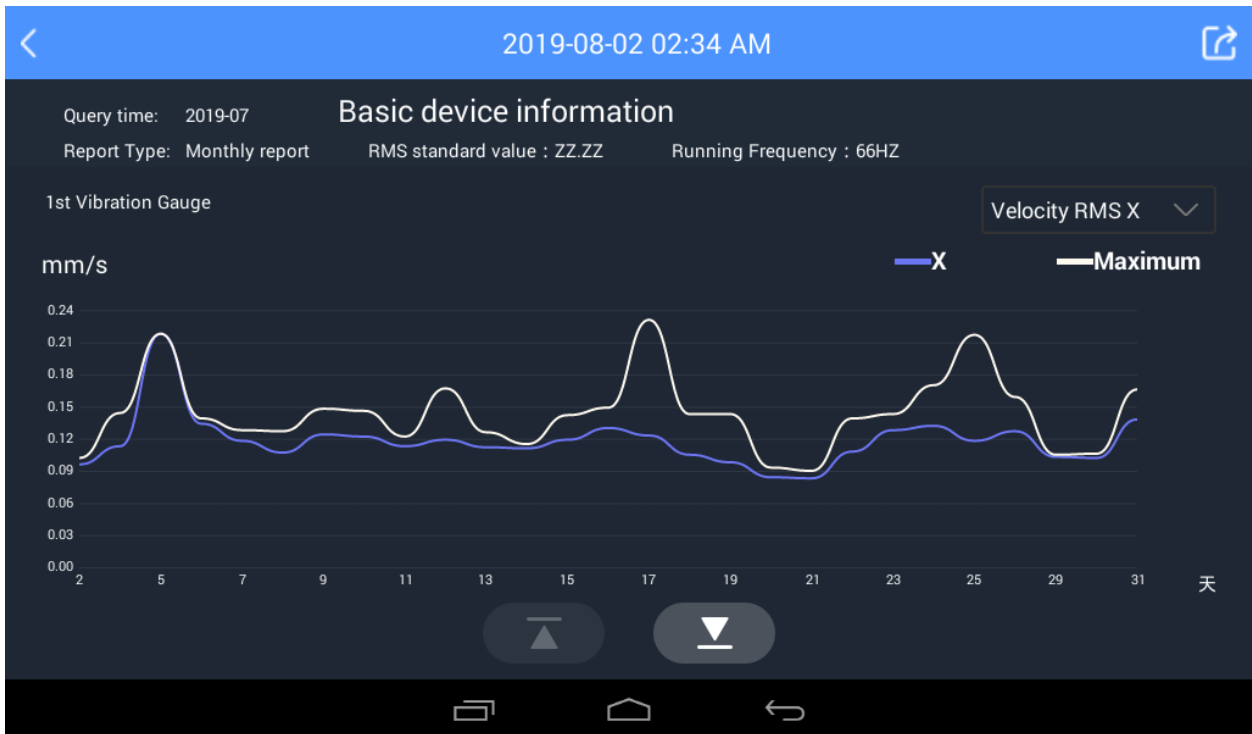


7. Report

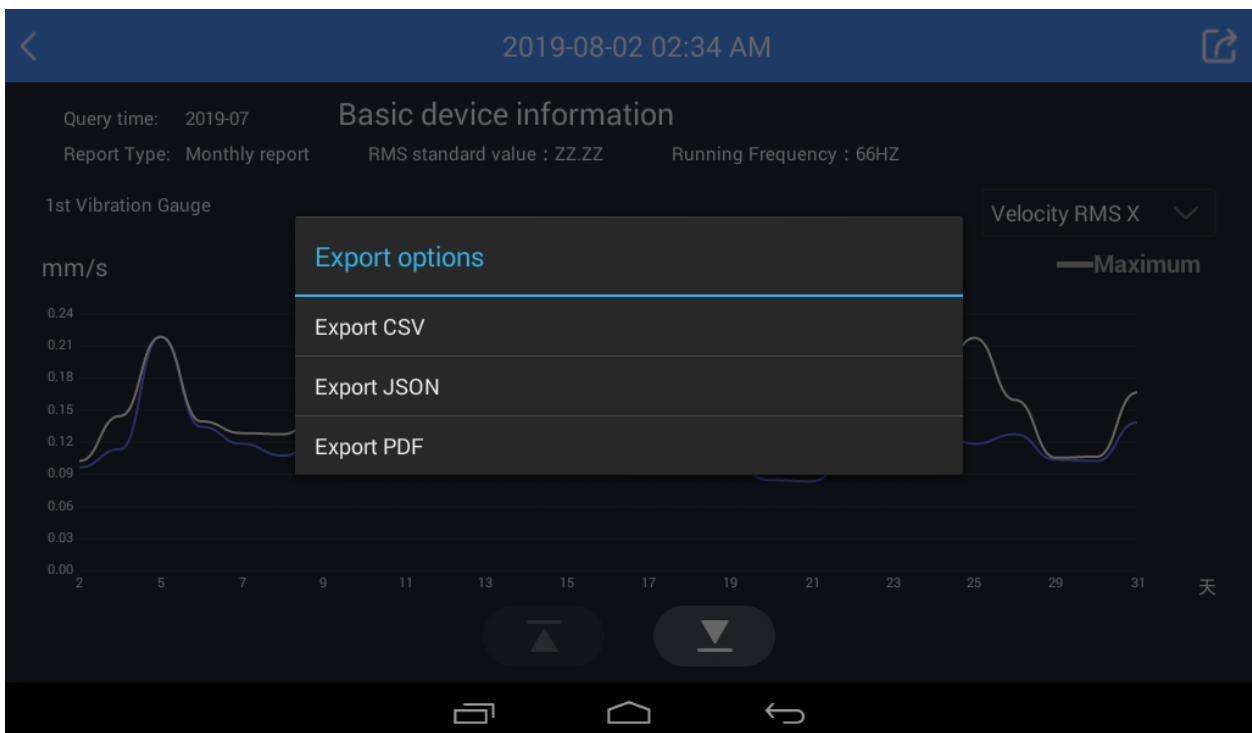
Users can query daily and monthly reports:



When choosing monthly reports, the query time column day will not be optional. Choose a month. The query results are the average and maximum data curve of each day in that month:



Users can choose the parameter type and axis, the system will switch the curve to the corresponding type and axis, click the button below to switch to the next vibration gauge and the alarm record of the month. Click the “Export” button in the upper right corner to export the operation reports in different formats. The reports will be saved under the VB900UI directory of the built-in sdcard:



Users can copy reports by connecting micro USB cable to VB900 device.