



Ronds Wireless Condition Monitoring

Help You to Realize Predictive Maintenance

Monitor your machinery real-time condition

Predict machinery failure to avoid unplanned downtime

Reduce Maintenance costs

Provide data support for making maintenance plans

Increase machinery life and enhance machinery reliability

RONDS Wireless Series
RH560, RH505
RH605/RH605D

Make Industry Better
www.ronds.com.cn



Ronds Wireless Condition Monitoring System is a condition monitoring based predictive maintenance solution for industrial enterprises, which is designed for scattered machines. It can measure both vibration and temperature signals. The software EPM is used to monitor machine real time condition, help customers to learn machine's fault in advance and avoid unplanned downtime.

ENHANCE RELIABILITY OF YOUR MACHINERY

Why Ronds

SECURITY CONTROL

Avoid potential risk through monitor industrial machines with safety implications, control real time condition of machines.

PRODUCTION GUARANTEE

Reduce unplanned downtime, improve overall equipment efficiency, ensure long cycles continuous production.

MACHINERY APPRECIATION

Precisely predict machinery failure mechanism, reduce maintenance cost, prolong machines service life, increase the return on investment.

INTELLIGENT DECISION MAKING

Based on machinery condition, support for intelligent management, improve machinery operating efficiency.

LOWER LABOR COST, HIGH EFFICIENCY

Use online technology instead of portable data acquisition, remote data analysis based on intelligent platform is available.



Common Failures detected by RONDS wireless

Bearing Failure

Imbalance

Resonance

Electrical Failure

Misalignment

Shaft bending

Coupling Failure

Gear Failure

Bad Lubrication

Mechanical Looseness

Others

Shaft/bearing Wear

RONDS SOLUTION ADVANTAGES



WIDE FREQUENCY RANGE & SMART DATA ACQUISITION

Up to 20KHz frequency range can capture the machine fault at early stage. With Cloud based software and preset DAQ strategy, complete data acquisition, processing and transmission of machines' vibration and temperature signal, achieve smart monitoring, ensure machine safety and continuous running.

ALL CHANNEL SYNCHRONOUS ACQUISITION

Synchronously collect temperature and vibration signal, it increases machine safety through dual monitoring of vibration and temperature data. Each wireless gateway can work with 45 units wireless sensors maximally.

LONG TRANSMISSION DISTANCE

Distance ranges between wireless gateway and sensors up to 300m line of sight

RELIABLE AND LONG TIME OF SENSOR

Battery of sensors can work for 2-3 years

HIGH COMPABILITY

Integration with self-designed applications with free API, OPC, Modbus etc.

EASY TO USE

Easy to use and install, no signal cable required, ATEX certification is available for hazardous industrial field. One key remote upgrade, system upgrade is quick, accurate, efficient and convenient.

INTELLIGENT ALARM FOR ABNORMAL MACHINES

Adopting various kinds of intelligent alarm parameters like overall value, index, temperature, etc., ensure the accuracy and timeliness of alarm information.



SPECIFICATION



RH505 Wireless One Axial Vibration & Temperature Sensor

- ❑ Frequency Range: 2~20KHZ (Piezo)
- ❑ Range: $\pm 50g$
- ❑ Lines: 51200
- ❑ Long Time Waveform: 2M
- ❑ Integrated design, built-in antenna, low consumption
- ❑ Wireless transmission: 300m line of sight
- ❑ IP Grade IP68



RH605 Wireless Triaxial Vibration & Temperature Sensor

- ❑ Frequency Range: Piezo(Z): 2~20KHz, MEMS(X,Y): 2-1kHz, $\pm 3dB$
- ❑ Lines: 51200(Piezo); 2560(Mems)
- ❑ Range: Piezo: $\pm 50g$, MEMS: $\pm 16g$
- ❑ Integrated design, built-in antenna, low consumption
- ❑ Wireless transmission : 300m line of sight
- ❑ IP Grade IP68



RH560 Wireless Gateway

- ❑ Low consumption, IP66
- ❑ Wireless data transmission distance: 300m line of sight
- ❑ Support maximum 45 sensors
- ❑ Ethernet, optic fiber, Wi-Fi, 4G communication method options
- ❑ EX Grade: ExialICT4 (0~2 zone)

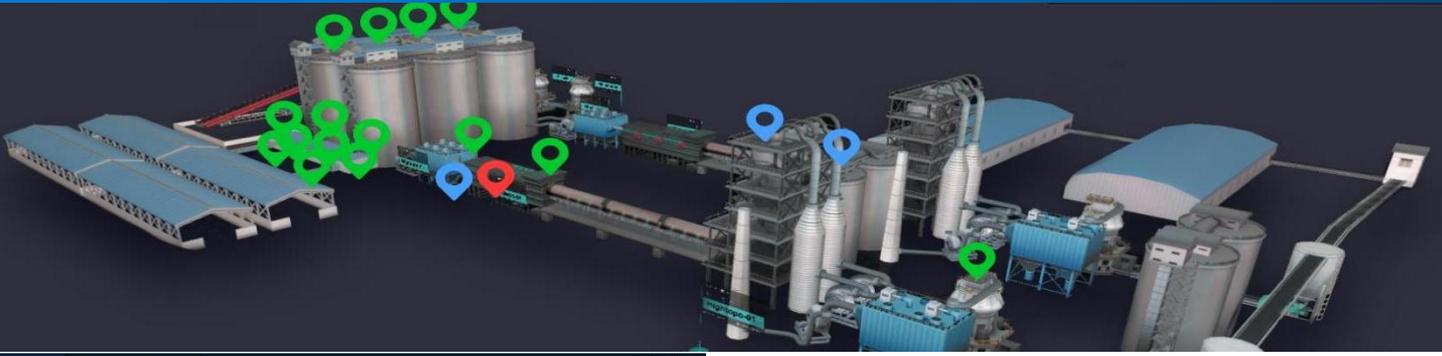


RH605D Wireless Vibration & Temperature Transmitter

- ❑ Frequency Range: Piezo(Z): 2~20KHz, MEMS(X,Y): 2-1kHz, $\pm 3dB$
- ❑ Lines: 51200(Piezo); 2560(Mems)
- ❑ Range: Piezo: $\pm 50g$, MEMS: $\pm 16g$
- ❑ Ambient Temperature: $-40 \sim 70 \text{ }^{\circ}\text{C}$; Probe: $-40 \sim 120^{\circ}\text{C}$
- ❑ Wireless transmission : 300m line of sight
- ❑ IP Grade: IP67(Main body); IP68(Probe)

RH605-D is a split form of RH605. It is mainly used in some scenarios where the installation location is narrow, the signal is shielded by a metal cabinet or shell, and the temperature is high. The split design can solve the problem of poor signal quality at the installation location and narrow location. It is designed as one-axis piezoelectric signal plus two-axis MEMS signal and auxiliary temperature measurement function. It works with RH560 wireless gateway.

FEATURES OF ONLINE SOFTWARE EPM



EASILY BROWSE YOUR MACHINERY CONDITION

EPM is based on B/S structure, the clients can view the machine condition anytime and anywhere. Our professional software has abundant statistics function, this is the machinery management interface, it can help customers to learn their machinery overall operating status.



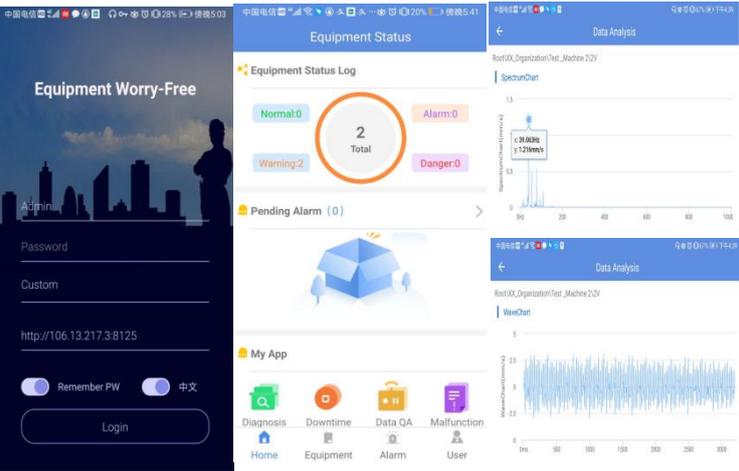
POWERFUL AND USERFRIENDLY ANALYSIS TOOLS

EPM has plenty of analysis tools: time waveform, spectrum, trend, water-full, orbit, envelop, etc. The software is capable of automatically identifying 1X (running speed).



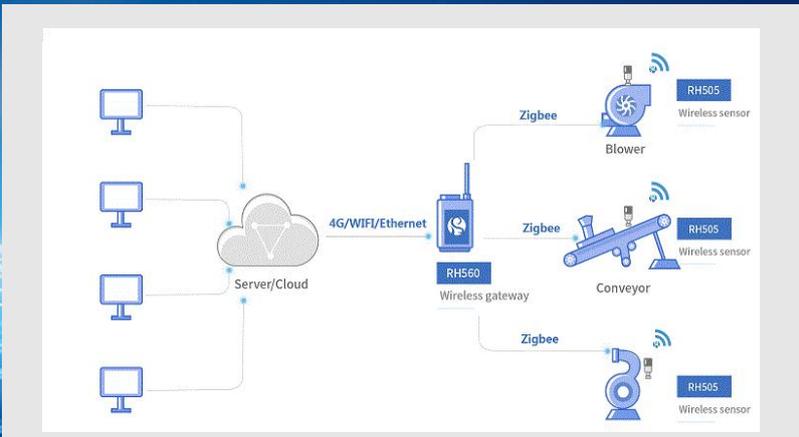
SYNCHRONOUS DATA IN APP

APP is available for the client to view the prompt alarm information and have a simple glance of the detailed alarm data, like trend, time waveform and spectrum.



REALIZE REMOTE MONITORING BY CLOUD BASED SOFTWARE

Cloud based software allows the clients to install the sensors in any place of the world. Moreover 5G/4G communication can transmit the data directly to the cloud, no need to use onsite network.





ABOUT RONDS

Ronds is a high-tech enterprise which provides equipment intelligent O&M platform and dynamic equipment predictive maintenance products and services.

Ronds owns core technology in remote machinery monitoring, failure diagnosis, intelligent O&M, and has technical capabilities in hardware and software development, platform construction, remote diagnosis etc.

Ronds products and services have been applied in many big enterprises in more than ten industries, such as petrochemical, electric power, metallurgy, cement, coal, coal chemical, rail transit, municipal, water treatment, port and other industries.

Ronds was established in Hefei City in 2007 and listed on Star Market of the Shanghai Stock Exchange on July 26, 2021 (stock code: 688768).

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