Instaguard- Device intelligent care diagnostic system

Making device care even easier

中科时代 SINSEGYE

Machine condition monitoring diagnostics

Product introduction

The machine condition monitoring and diagnosis instrument collects the data of the equipment acceleration, speed and temperature, and can warn and predict the rotating equipment fault through the embedded intelligent diagnosis algorithm.

Widely consumed

Machine condition monitoring and diagnosis instrument is suitable for pump, fan, motor and other rotating equipment. It can be effectively applied in petroleum, chemical, steel, water, cement, mining and other industrial fields.

How tired data collection

- ✓ Three-axis acceleration and speed monitoring, waveform and spectrum data can be uploaded;
- ✓ Equipment surface temperature monitoring;

High Precision

- ✓ Frequency response range 0.1Hz to 10KHz (Z-axis);

High reliability

- ✓ Different installation methods are widely applicable;
- ✓ Battery life: 2 years (default working environment);

Energy saving safety protection

- ✓ IP67 protection rating;
- ✓ ExiaIICT4 explosion-proof grade;
- ✓ Ultra-low power consumption design, anti-loss design.

Multi-channel communication mode

- ✓ zigbee, 4 G Cat1, ble5.0 multiple communication methods.

Edge computing analysis

- ✓ Built-in chip and edge algorithm library, to achieve local real-time analysis of anomaly detection, response time is less than 10 minutes.

Install simple Edge

- ✓ Magnetic, adhesive, stud three installation methods, easy disassembly.

Data security encryption

- ✓ The embedded encryption algorithm is adopted to ensure the safety of data transmission.

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Product model	SD3300
Acceleration	
Number of axes to measure	3 axes
Perception unit	Piezoelectric ceramics + MEMS
Amplitude range	Z-axis: ±50 g peak and X and Y axis: ± 16 g peak
Measurement accuracy	±5% (160 Hz)
Data acquisition	
Acceleration frequency range	Z-axis: 0.1 Hz (± 3dB) to 10 kHz (±3 dB) X and Y axes: 0.5 Hz (±3 dB) to 1.6 kHz (±3 dB)
Acceleration amplitude range	± 50 g
ADC fineness	24-bit AD C
Sampling rate	1KHz - 5 0 KHz
Sampling length	2K bytes - 2 M bytes
Measuring intervals	10 minute indicator and 2 hour time domain waveform
Output mode	Total value, effective value and spectral time domain waveform
Temperature collection	
Measuring range	-40 ° C to 120 ° C (device surface temperature)
Precision	0. 1 °C
Wireless communications	
Communication mode	Zig Bee
Wireless frequency range	2.4GHz ISM band
Encryption/Security	128-bit AES encrypted transmission and output
Rf output power	5d bm (Max)
Wireless communication distance	300 m visual distance without obstacles (if there is obstruction, it depends on the actual situation)
Matching net	SD3400 / SD3410
Bluetooth	Integrated Bluetooth 5.0 communication module
Battery	
Battery type number	3.6V lithium sub-battery (in line with national standards, convenient cell replacement)
Life	Designed life of 2 years
Mechanical parameters	
Weight	228g (including battery)
Overall dimensions	Height: 85 mm; Diameter: 4 3 mm
Fuselage material	Body: 304 stainless steel; Shell: reinforced impact resistant glass fiber PC top cover
Fixed studs	M10 x 1mm x 8mm
Protection grade	IP 67
Compliance Standards	
Electromagnetic compatibility standards	IEC 6 1326- 1
Radio frequency spectrum	ETSI EN 300 32 8
Security	Meet the technical requirements of micro power short range radio equipment
Explosion-proof safety	ExiaIICT 4

Note: The operating temperature is -40°C to 60°C (working at or beyond the limit temperature for a long time will affect the battery life and even damage the diagnostic instrument)

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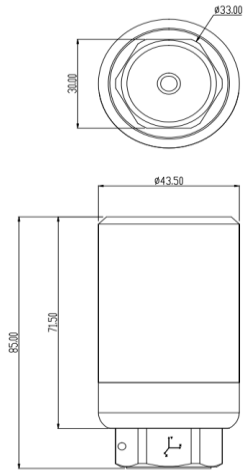
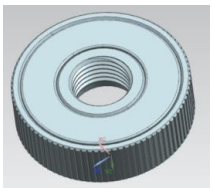
Product size

Unit: mm



Product accessories

Machine condition monitoring diagnostic instrument can be matched with the following accessories to complete the use, these accessories can be purchased, can also be ordered or downloaded separately, selected by the customer.

No.	Name	
one	M10 Ring magnetic holder (optional)	
2	Instaguard- Device Intelligent Care Diagnostic System Hardware User manual	
3	Instaguard- Device Intelligent Care Diagnostic System Quick Guide	