

IoT-AE Monitoring System



RAEM2 is an integrated wireless unmanned industrial condition monitoring system with internal battery, AE sensor, and wireless communication module. It is well-suited for the continuous acoustic emission signals monitoring such as leakage and wear signals, and can automatically trigger alarm notifications to users when the detected object is in abnormal conditions.

- Single channel, time triggering
- Communications: 4G, LoRa, Bluetooth
- Data transmission to local devices (PC, phones) and cloud servers
Suitable for timing monitoring for continuous signals, eg. leakage or wear signals.

Technical specs:

Channel	Single channel	Sampling rate	2MSPS
Sampling method	Time trigger	Sampling resolution	16-bit
Input frequency	10kHz-400KHz	Preamp power supply	28V
System noise	<30dB	Dynamic range	70dB
Protect grade	IP67	Max. signal	100dB
Sampling length	Max. 15000 points	Operating voltage	7.2V
Analog filter	30kHz-175kHz	Sleeping current	200uA
AE parameter	Amplitude, energy, RMS, ASL	Working temperature	-15°C~60°C
Digital filter	500kHz sampling rate: 125-175KHz, 10-80KHz, 30-80KHz 1000kHz sampling rate: 125-175KHz, 80-200KHz, 80-400KHz 2000kHz sampling rate: 125-175KHz, 80-200KHz, 80-400KHz		
Battery life	3 years battery life with interval sampling mode		
Sensor	Internal sensor with built-in preamplifier (customizable)		
Data output	Waveform, AE parameters and parameter rating		
Comm method	4G、Bluetooth、LoRa		
Power supply	Built-in battery		
Installation	Magnetic base, can be adsorbed on the metal surface of the object		
Accessories	Internet antenna, Bluetooth antenna, power adapter		

