

The CDS Wireless **AC210** is an industrial wireless vibration sensor for industrial equipment with wireless communication capabilities using either one of the industrial open standards, i.e., ISA100 Wireless or WirelessHART.

The **AC210** is a complex instrument which pre-processes acceleration samples using FFT algorithms and delivers filtered spectrograms along with time synchronized temperature and rotation speed data for predictive maintenance applications.



Data acquisition		
Vibration	Internal accelerometer	Resolution 16-bit, 3 axis, selectable scale $\pm 2/\pm 4/\pm 8/\pm 16$ g, signal bandwidth 6.3kHz
Temperature	Internal sensor	Resolution 16-bit, range -40°C to $+105^{\circ}\text{C}$, data output rate 104 Hz
Rotation	Internal magnetometer	Resolution 16-bit, 3 axis, range max 4500 RPM, not operational with magnetic adapter
Operating conditions		
Temperature	-40°C to $+85^{\circ}\text{C}$	
Humidity	max 90% RH	Non condensing
Wireless characteristics		
Operating frequency	2.405 GHz to 2.480 GHz	ISM band license free worldwide
Output power	12 dBm E.I.R.P.	
Range	300 m	Dependent on actual field conditions
Physical layer	IEEE 802.15.4-2011	Aligned with European Radio Equipment Directive (RED)
Radio channels	16	Channel width 5 MHz
Data rate	250 kb/s	Raw data rate, excluding protocol headers
Protocol upper layers	ISA100.11a (IEC 62734)	WirelessHART (IEC62591) available on request
Power		
Non rechargeable battery	3.6V D-size	Li-ion
Physical characteristics		
Size	120 x 65 mm	
Weight	350 g	Including battery
Mounting	8 mm thread	Optional magnetic mounting adapter