

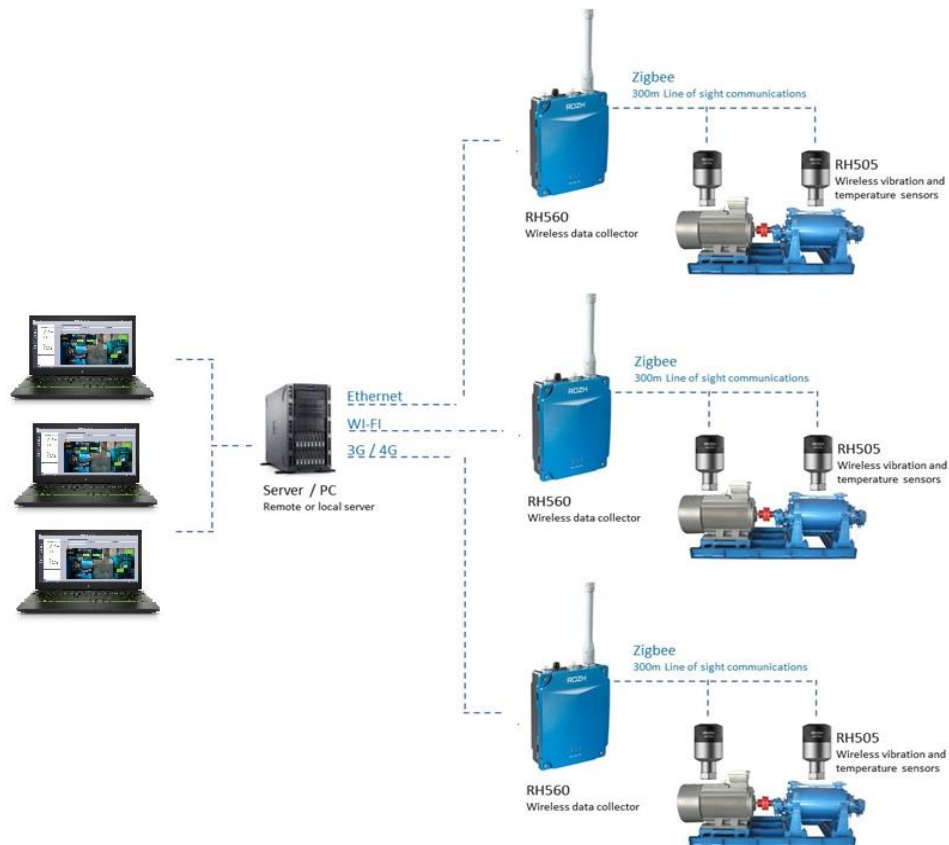
Wireless Condition Monitoring Technical Data

*Technology that Simply Creates
Solutions*



Wireless Topology

The Ronds wireless monitoring system utilises the Star (peer-peer) topology system, illustrated below. Each transmitter is designated to communicate to a specific receiver with a specific frequency band using Zigbee 2.4GHz IEEE 802.15.4 communications.



Wireless arrangement diagram for Ronds RH560 wireless system.



Specification Sheet: RH505 Sensor

RH505 Wireless Vibration and Temperature Sensor	
Performance Parameters:	
Vibration Range:	+/- 50g
Linearity:	1%
Frequency Range (+/- 3dB)	2~20kHz
Sampling Frequency	1280Hz~51.2kHz
Analysis Frequency (kHz)	0.5, 1, 2, 5, 10, 20
Sampling Length (Long Time Waveform)	64K, 128K, 256K, 512K
Sample Length (Data Acquisition Waveform)	1K, 2K, 4K, 8K, 16K, 32K
Temperature Range:	-40~125°C
Temperature Accuracy:	+/- 1°C (-10°C~85°C)
Electrical and Structure Parameters:	
Power Supply:	Disposable Lithium Battery, 2/3AA 3.6V 3.3Ah
Communications:	2.4GHz IEEE 802.15.4
Transmission Distance:	300 meters (direct line of sight / no interference)
Dimensions:	46mm x 94mm (diameter and height)
Weight:	188g
Mounting Screw:	M6
Mounting:	Stud / Magnet
Environmental Parameters:	
Working Temperature:	-40~70°C
IP Rating:	IP67
Explosion Proof Rating:	Exia II CT4 (suitable for Zone: 0, 1 and 2)
RH509 Wireless Speed Sensors	
Performance Parameters:	
Speed Measurement Range:	20~20000RPM
Speed Measurement Accuracy:	+/-2 RPM
Response Distance:	≤ 15mm



Specification Sheet: RH560 Data Collector (Receiver)

RH560 Wireless Data Collector (Receiver)	
Input / Output:	
Communication (with Sensor):	2.4GHz IEEE 802.15.4
Communication (with Server):	Ethernet, Fibre Optics, WI-FI, 3G/4G
Indication Lights:	Total of 3 LED (Working Status, Communication Status, Abnormal Status)
Maximum Capacity (Sensors)	60 Sensors
Electrical and Structure Parameters:	
Power Supply:	110 / 240 V AC / Disposable Lithium Battery 3.6V 38Ah
Dimensions:	203mm x 82mm x 260mm (Length x Width x Height)
Weight:	3kg
Mounting:	Fixation through holder
Environmental Parameters:	
Working Temperature:	-40~70°
Electrostatic Discharge Immunity:	IEC61000-4-2.4: Contact \pm 8kV, Air \pm 15kV
Surge Protection:	EN61000-4-5: \pm 4kV
IP Rating:	<u>IP65</u>
Explosion Proof Rating:	Exd II CT4 (suitable for: Zone 0, 1 and 2)

