



Advanced Environmental Monitoring Solution



ARVATCH Your reliable partner for real-time environmental condition monitoring, designed for industrial, environmental, and healthcare applications.

Applications:

- Industrial and Manufacturing Facilities
- Power Generation & Petrochemical Plans
- Healthcare Facilities
- Data Centers
- Offices and Indoor Spaces





Features

1. Real-Time Monitoring:

Temperature, humidity, Pressure CO2, TVOC, NOx, PM2.5–PM10 levels, Formaldehyde, and Vibration.

2. Connectivity Options:

Power over Ethernet (PoE), Ethernet, USB Type-C, Bluetooth, KNX and WiFi for easy integration.

3. Embedded Web Server:

Access real-time data, monitor trends.

4. Data Visualization and Trend Analysis:

Intuitive charts and graphs to track environmental conditions over time.

5. Data Export:

Export logs in multiple formats, for analysis and reporting.

6. Supported Communication Protocols:

Compatibility with various communication protocols including BACnet and KNX, for seamless integration

7. Inspector Cloud Integration:

- Real-Time Data Sync: Access data anytime, anywhere.
- Scalability: Cloud storage accommodates years of historical data.
- Data Backup: Automated backups enhance security and prevent data loss.

8. Secure Data Transfer:

End-to-end encryption for data sent to the Inspector Cloud.

9. Memory & Storage:

8 GB internal storage with expandable storage options.

10. Easy Installation:

Simple setup in just a few minutes.





AirWatch Standard Specifications

Specifications Model: IRW-R1	Part number: BB0205A010	
Humidity Sensor "Measurement Range"	Resolution	Accuracy
0 - 100 % RH	1% RH	±3 %RH
Temperature Sensor "Measurement Range"	Resolution	Accuracy
(0)°C - (+85)°C	0.1 °C	±1 °C
Pressure Sensor "Measurement Range"	Resolution	Accuracy
300 - 1100 mbar	1 mbar	±2mba
TVOC - Total Volatile Organic Component Range	Resolution	Accuracy
		±15 %
0 - 1000 ppm	1 ppb	
NOx - Mono Nitrogen Oxides Range	Resolution	
0 - 10 ppm	1 ppb	±15 %
CO2 - Mono Carbon Dioxide Range	Resolution	Accuracy
0 to 1000 ppm	1 ppb	± (40 ppm + 5%)
PM - Particulate Matter Rang	Resolution	Accuracy
0 to 1000 μg /m3	11 μg /m3	(PM2.5) ± 10 μg /m3
Formaldehyde concentration Rang	Resolution	Accuracy
0-1000 ppb	< 20 ppb	±20 ppb
Ozone (O₃), Sulfur Dioxide (SO₂), H₂S, Co	Optional	
Vibration Sensor Specification		
Measurement Range	Up to ±8 g	
Sensitivity	4 mg/digit	
Accelerometer Type	Three-axis "Nano" accelerometer	
Sampling Rates (Output Data Rate)	1-400 Hz (Sample Per Second)	
Other Monitoring beside the vibration	Free-fall detection & shock and Impact	
Communication and Connectivity		
Ethernet	10/100/1000Base-T (RJ45)	
Power over Ethernet (PoE):	Ensures reliable power supply through Ethernet	
WIFI	802.11b/g/n for wireless data access	
Bluetooth	Bluetooth 5 for data access	
USB	Type-C for data transfer and power options	
KNX (Optional)	Twisted pair, KNX TP1-256 supported	
Indicators	Two LED (online, Alarm)	
Power Specifications		
POE Input Voltage	33 V to 72 V / 350mA IEEE 802.3af (PoE)	
USB Input Voltage	5v/2.5A	
Power Consumption	~ 12.5 W	
Environmental& Mechanical Specifications		
Enclosure	ABS Plastic	
Operating Temperature	0 - 50 °C	
Storage Temperature	-20 - 60°C	
Relative Humidity	0-95% RH	
Dimensions	104 mm x 92 mm x 42 mm	
Weight	120 g	
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