WIRELESS TECHNOLOGY FOR COST-EFFECTIVENESS, SAFETY, AND CONVENIENCE

airius
WIRELESS VIBRATION SENSOR

Australian / New Zealand Distributor---------
Machinery Vibration Specialists Aust P/L
121 St. Johns Avenue GORDON NSW 2072
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Providing warning of vibration-related problems as well as gear and bearing faults, Airius is a wireless, battery-powered vibration sensor ideal for remote condition monitoring of standard production equipment such as pumps and fans. Designed and manufactured by SPM Instrument, the sensor builds on fifty years of experience in developing reliable and industry-leading solutions for condition monitoring.

Remote condition monitoring of machinery enables maintenance departments to cut down on maintenance routes, leaving time to work on improvements in other areas of the plant. It also saves costs in terms of cabling and other hardware associated with wired sensors. Airius is ideal for monitoring remote or inaccessible machines, or machines placed in hostile or risky environments – anywhere the wireless transfer of vibration data is practical, or even a matter of safety.

CONNECTIVITY MADE EASY

The Airius sensors are a smart way to start with online condition monitoring. It is easy to start small with the new cloud-based application Condmaster.NET© (hosted in SPM Cloud), providing easy access to measurement data through a user-friendly graphical interface, then expand with the sophisticated analysis and diagnostic software Condmaster© Ruby.

INDUSTRY-LEADING MEASUREMENT TECHNOLOGY

Airius is a MEMS type sensor with digital output, measuring triaxial vibration and temperature. The sensor currently comes in two versions; one measuring in the 10-1000 Hz frequency range, the other between 2-1000Hz and 10-5000 Hz with envelope measurement capabilities. Airius supports several different vibration measurement assignments per sensor, with a user-defined number of time-based daily measurements.

TYPICAL APPLICATIONS

SPM

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Additional measurements can be manually triggered by pressing a single button on the side of the sensor. The signal processing algorithms and calculation routines used are the same as in the high-end Intellinova© online system and the sophisticated portable Leonova© Diamond and Leonova© Emerald instruments.

EASY INTEGRATION AND TROUBLE-FREE USE

Practical and robust, the Airius sensors have a compact design and an efficient and energy-saving communication protocol. The careful design and optimal choice of battery technology ensure years of troublefree use and stable monitoring. In idle state, sensor power consumption is extremely low. Using the well-established and stable WiFi data transfer technology, Airius is an easy-to-implement solution that works well within existing IT environments.

STRAIGHTFORWARD INSTALLATION AND EFFORTLESS SETUP

Airius does not require any supplementary equipment besides WiFi routers. The sensors have the shortest response times in the segment, making installation and commissioning straightforward and fast. The SPM Connect App, downloadable for mobile devices, is used to configure the necessary communication parameters to connect to the database; either through the Condmaster Entity Server (CES) communication program or through secure transfer via SPM Cloud to Condmaster.NET. Once installed and configured, the Airius sensors are managed and run alongside SPM online and offline measurement systems. REST API support allows other devices or process control systems to retrieve vibration data from the sensor.

When used with Condmaster Ruby, rotational speed and process parameters can be retrieved as a global value and registered along with the vibration reading. Furthermore, condition parameters can be utilized to determine whether or not a reading should be saved.

AIRIUS – CONNECTIVITY DOESN´T HAVE TO BE COMPLICATED

HD RESOLUTION

airius
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SPM INSTRUMENT INTRODUCES THE AIRIUS™ WIRELESS VIBRATION SENSORS

SPM Instrument AB, leading worldwide provider of condition monitoring technology and products, today announces the release of Airius™, a range of wireless vibration sensors for remote monitoring of industrial equipment.

Providing warning of vibration-related problems as well as gear and bearing faults, Airius is a wireless, battery-powered sensor ideal for remote condition monitoring of standard production equipment such as pumps and fans. Designed and manufactured by SPM Instrument, the sensors build on fifty years of experience in developing reliable and industry-leading solutions for condition monitoring.

WIRELESS TECHNOLOGY FOR COST-EFFECTIVENESS, SAFETY, AND CONVENIENCE

Remote condition monitoring of machinery enables maintenance departments to cut down on maintenance routes, leaving time to work on improvements in other areas of the plant. It also saves costs in terms of cabling and other hardware associated with wired sensors. Airius is ideal for monitoring remote or inaccessible machines, or machines in hostile or risky environments – anywhere the wireless transfer of vibration data is practical, or even a matter of safety.

The Airius sensors are a logical first step into online condition monitoring. It is easy to start small with the cloud-based application Condmaster®.NET (hosted in SPM Cloud), providing easy access to measurement data through a user-friendly graphical interface, then expand with the sophisticated analysis and diagnostic software Condmaster® Ruby.

INDUSTRY-LEADING MEASUREMENT TECHNOLOGY

Airius is a MEMS type sensor with digital output, measuring triaxial vibration and temperature. The sensor currently comes in two versions; one measuring in the 10-1000 Hz frequency range, the other between 2-1000 Hz and 10-5000 Hz with envelope measurement capabilities. Airius supports several different vibration measurement assignments per sensor, with a user-defined number of time-based daily measurements. The signal processing algorithms and calculation routines used are the same as in the high-end Intellinova® online system and the sophisticated portable Leonova® Diamond and Leonova® Emerald instruments.

EASY INTEGRATION AND TROUBLE-FREE USE

The Airius sensors have a compact design, with an energy-saving communication protocol. The careful design and optimal choice of battery technology ensure years of troublefree use and stable monitoring. In idle state, sensor power consumption is extremely low. Using the well-established and stable WiFi data transfer technology, Airius is an easy-to-implement solution that works well within existing IT environments. The IP69 rating makes Airius SPM's most durable sensor, suitable for even the most demanding environments.

STRAIGHTFORWARD INSTALLATION AND EFFORTLESS SETUP

Airius does not require any supplementary equipment besides WiFi routers. The sensors have the shortest response times in the segment, making installation and commissioning straightforward and fast. The SPM Connect app, downloadable for Android and iOS devices, is used to configure the necessary communication parameters to connect to the database. REST API support allows other devices or process control systems to retrieve vibration data from the sensor.

The Airius sensors and SPM Connect app will be available for delivery and download from the week starting June 17th, 2019. Ex versions for potentially explosive environments will be released in the fall of 2019.

PRESS RELEASE

For further information, please contact:
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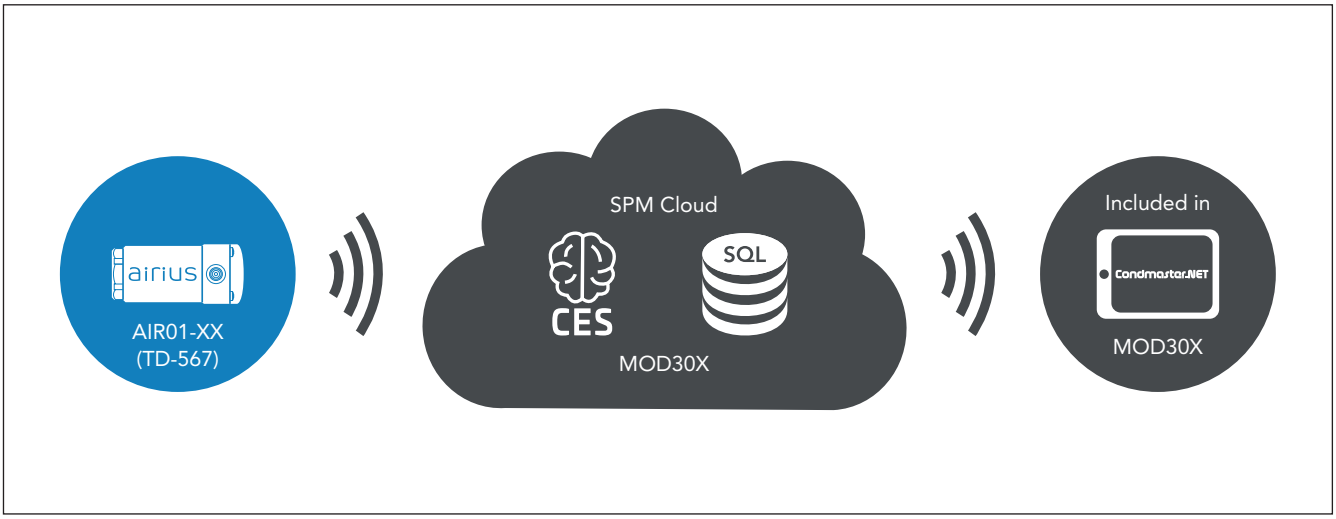
SPM Cloud solution – with Condmaster.NET and Airius



The SPM Cloud solution with monthly subscription enables access to measurement data from the Airius sensors. Stored in SPM Cloud, the smart data from CES (Condmaster Entity Server) can be viewed in Condmaster.NET from any device with Internet access – anytime, anywhere in the world.

The solution includes:

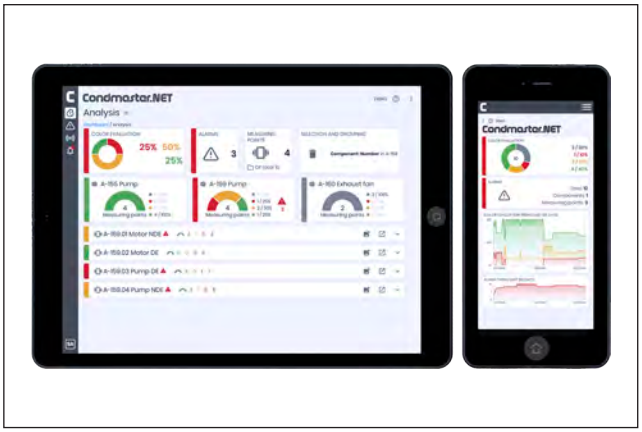
- SQL Server in SPM Cloud
- Condmaster.NET
- CES in SPM Cloud
- Airius (ordered separately; see TD-567)

SPM Cloud offers a secure SQL Server with very high availability. For each part number, the storage space specified is guaranteed to be sufficient for three years when performing four 3-channel measurements per Airius sensor and day. Additional data storage can easily be added through part number MOD310.

Condmaster.NET is an easy-to-use web application for evaluation of measurement results from the Airius sensors. Included in the SPM Cloud packages, Condmaster.NET provides access to measurement data via all devices, e.g., computers, tablets, and smartphones. Users log onto Condmaster.NET to view spectrums, time signals, trends, and alarms – all based on data residing in SPM Cloud.

The web application allows users to create components and measuring points as well as set up vibration and temperature measurements. The dashboard provides an overview of the current condition status of all measuring point, alarms, and any issues on component and measuring point level. There is no limit to the number of user accounts that can be created and used in Condmaster.NET.

CES is a high-performance backend communication program that controls and links the Airius sensors and Condmaster.NET, transmitting measuring assignments to the sensors and accepting the measuring results. Using a virtual digital signal processor (DSP), CES performs advanced signal processing algorithms, providing smart data to Condmaster.NET.



Airius® is a vibration sensor ideal for remote condition monitoring of standard production equipment such as pumps and fans. The maximum number of Airius sensors that can be included in a given SPM Cloud solution is specified in the part numbers below. The Airius sensors are ordered separately; see technical data sheet TD-567.

Part numbers

MOD300	SPM Cloud: up to 24 sensors, 10 GB data storage
MOD301	SPM Cloud: up to 49 sensors, 20 GB data storage
MOD302	SPM Cloud: up to 99 sensors, 40 GB data storage
MOD303	SPM Cloud: up to 199 sensors, 80 GB data storage
MOD304	SPM Cloud: up to 499 sensors, 200 GB data storage
MOD305	SPM Cloud: more than 499 sensors*

* Please contact SPM Instrument for information.

Options

MOD310	10 GB extra data storage

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SPM

Condmaster® 2020 RUBY

PRESS RELEASE

January 31st, 2020

SPM INSTRUMENT PRESENTS CONDMASTER© RUBY 2020

SPM Instrument AB, Sweden, leading provider of condition monitoring technology and products, today announces the launch of Condmaster© Ruby 2020. The new version of this comprehensive condition monitoring diagnostics and troubleshooting software is the result of intensive development efforts to provide truly flexible software, offering capabilities unique to SPM as well as optimal digitization and data exchange opportunities in IIoT environments. With a strong focus on a smooth, efficient, and productive user experience, this release gives users even more powerful tools to get their job done.

Flexible, future-ready software with extended platform functionality

With the arrival of Condmaster Ruby 2020, this powerful software takes significant steps to meet the technical challenges of an increasingly digitized industry while at the same time taking full advantage of its opportunities.

Condmaster Ruby now comes with more functionality included in the platform package, enabling all customers to benefit from many useful features such as Plant Performer and Colored Spectrum Overview.

A very convenient new tool is **Machine Builder**, which provides a graphical drag-and-drop interface to create complete machines from components, and automatically obtain all measurement assignment settings.

The new **Entity rules** function is a step towards the implementation of machine learning. This highly flexible and powerful function can be used to expand and customize Condmaster with customer-unique, event-driven functions and automatically invoked actions – in Condmaster or other systems.

The new Condmaster.NET web application and mobile app provide a clear, easy-to-understand overview of machine condition and overall plant status on all commonly used platforms.

Condmaster Entity Server – a powerhouse of data processing and integration capacity

The new **CES Admin Portal** in Condmaster Entity Server handles centralized license, database, and user administration, and also supports external user directories such as Microsoft Azure AD and Active Directory Federation Services. This backend centralization means simplified identity management for admins and a streamlined user login experience.

Furthermore, the **Analytics Engine** – also part of Condmaster Entity Server – has been further developed, providing Big data processing power as well as the capacity to handle process-related data, which can be monitored in customer-specific dashboards in Condmaster.NET. An extensive library of API functions enables exceptionally flexible and advanced third-party integration solutions.

For more information on these and other news in Condmaster Ruby 2020, download '*Condmaster Ruby 2020 Upgrade Benefits*' or contact your nearest SPM company or distributor.

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Condmaster® 2020 RUBY

UPGRADE BENEFITS

Condmaster Ruby is a highly flexible diagnostic and analysis software, offering unique condition monitoring functionality and process optimization capabilities. The new release arrives with optimal digitization and data exchange opportunities for IIoT environments. Powerful further developments enhance performance and throughput, as well as extended accessibility of condition monitoring data to more platforms to suit different user needs.

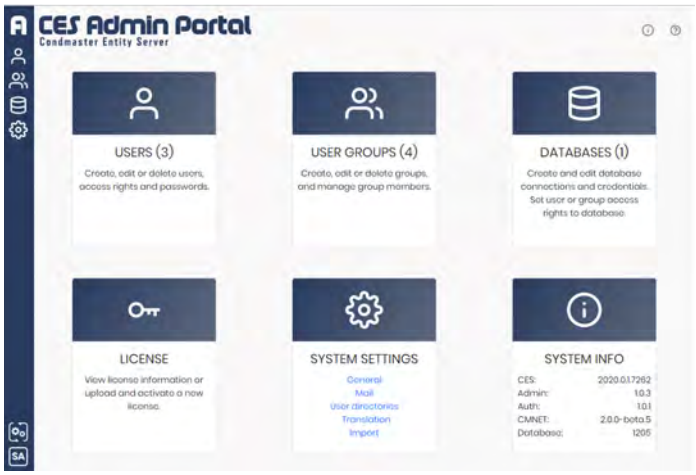
Overview of key upgrade benefits

- The concept of '**machine**' is added as a new, top-level entity in the **Measuring Point Tree** and the **Graphical Overview**. Components and measuring points can thus be sorted hierarchically as entities belonging to a machine.
- The **Machine Builder** is a new, powerful and time-saving feature in Condmaster. From a built-in library, users can drag-and-drop components such as electric motors, gearboxes, fans, and pumps, to create machines and complete applications, for which Condmaster automatically generates appropriate measuring points, measurement assignments, and machine fault symptoms. Color zones are created automatically, and components and machines created with Machine Builder can be saved in a template library for reuse.

- The highly flexible and powerful **Entity rules** function can be used as a hub for expanding and customizing Condmaster with customer-unique, event-driven functions, as well as creating custom integrations with other IIoT systems. The function makes it possible to monitor a variety of events and automatically invoke actions – in Condmaster or elsewhere – based on these events.
- The new **Condmaster.NET** web application and downloadable app for iOS and Android can now be used to access Condmaster Ruby data via web browsers on all types of devices. Simplicity is at the core of Condmaster.NET; it presents an intuitive and easily accessible overview of color evaluation and alarms and offers basic analysis functionality. Application-specific, customized dashboards to visualize and monitor process data can be created on request. Furthermore, the Plant Performer function and live display of online measuring units are now part of Condmaster.NET.

- Available for the Intellinova Parallel EN system, the new **Signal Quality Test** is a background process that continuously checks for ski slopes and bias problems. It can also help identify problems with faulty or incorrectly connected transducers.

- Enhancements in **Condmaster Entity Server** (CES) include the centralization of backend functionality, such as system configuration and new, modern and easy-to-use management of databases, licenses, users, and user groups through the new CES Admin Portal. This functionality is OAuth 2.0 compatible and also supports external user directories such as Microsoft Azure AD and Active Directory Federation Services. The introduction of the CES Admin Portal and transition to a scheme with only floating licenses simplifies license management considerably. For Condmaster.NET, no license restrictions apply, meaning that users can log in from any number of web browsers and/or smartphones.



- Extensive further development of the **API interface**, enabling extremely flexible and advanced third-party integration solutions.
- An integral part of Condmaster Entity Server, the **Analytics Engine** has undergone continued development to provide increased data processing and computing capacity, thus paving the way for AI and machine learning implementation.
- Condmaster Ruby 2020 now supports and is delivered with **SQL Server 2019**.
- **More functionality in the platform**: As of the Condmaster Ruby 2020 version, the number of modules is reduced and more functions are thus included in the platform.
- New and **simplified installation** procedure.
- The **built-in web browser** in Condmaster Ruby has been revised. Used primarily for the display of the User Guide, it now also enables users to view Condmaster.NET content from within Condmaster Ruby.
- Condmaster Ruby now offers the possibility to set up Intellinova Parallel EN measurement assignments to be performed only by **manually forced measurement**.
- Global values can now be defined as type 'API', e.g., for integration purposes.
- **LinX** now supports Condmaster Entity Server (CES), such that database connections are made to CES rather than to SQL Server. Furthermore, LinX now also supports **Modbus TCP database values** in addition to raw and evaluated values.

How to upgrade

The upgrade process is straightforward. Condmaster Ruby 2020 is backwards compatible and users of the 2019 or earlier versions install the new software, then transfer the contents of the existing Condmaster database using a safety copy.

Minimum system requirements

- Windows 7 or later
- 1 GHz 32-bit (x86) or 64-bit (x64) processor
- 1 GB of RAM memory
- 15 GB free disc space
- Microsoft SQL Server 2016 or later

(see the Condmaster Ruby installation manual for more information)

Note: Microsoft SQL Server 2016 requires Windows 8 (64-bit) or later with at least 1.4 GHz CPU. Condmaster Entity Server (CES) requires 64-bit Windows. LinX (handling the Intellinova Standard and Intellinova Compact online systems) and CES require higher data performance than those specified above.

For more information and recommended system requirements, see the Condmaster Ruby Installation and system administration manual, document no. 72260, and spminstrument.com/products/condmaster/.

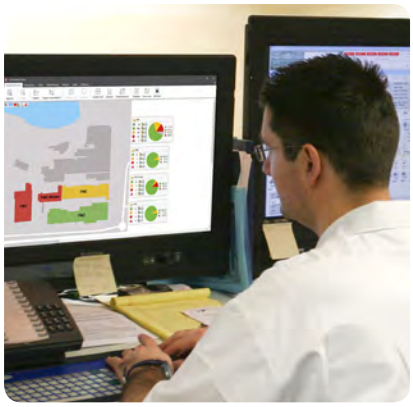
SPM
condition monitoring solutions

Condmaster® Ruby 2020 – Platform

PRELIMINARY

Measuring techniques and functions included in platform

SPM HDm/HDc	ISO 2372	Voice recording
Color Spectrum Overview, CSO	Plant Performer	User-defined measurements (analog input as voltage or current, or manual input)
RPM measurement	SAP and AMOS links	
Measuring Point Imaging	Web and e-mail alarms	
REST API	Temperature measurement	



Condmaster® Ruby 2020 is a comprehensive condition monitoring and predictive maintenance program. Module built, it can be tailored to your selected hardware.

Condmaster Ruby communicates with all SPM handheld data logging instruments and Ethernet compatible online systems for continuous condition monitoring. It works under Windows 7 or later and uses SQL Server 2016 or later as database handler (SQL Server 2019 Express Edition is included on the installation media, managing up to 10 GB of data).

The Condmaster Ruby platform includes the following measuring techniques:

- Shock pulse technology SPM HDm/HDc. The scalar decibel value HDm represents the highest shock pulses found during the measuring cycle, and is the primary value for determining the severity of a bearing damage, and also to trigger alarms. HDc, also a scalar dB value, is useful to determine lubrication condition.
- ISO2372 vibration measurement
- Two user-defined measurements, with special input window for temperature (data input as analogue voltage or current, or manual)
- RPM measurement
- Temperature measurement

The basic program functions are:

- Checkpoint (free text describing maintenance activity). It also has a runtime counter for machine operating hours.
- Contact free identification tags, CondID®, can be loaded with basic data and the latest measuring results.
- Measuring point definition, using a customer-defined numbering system and including input data for all active measuring techniques.
- Graphical overview, showing measuring point location as a hierarchical structure and/or with pictures, from plant down to machine or measuring point level.
- Creation of measuring rounds and communication with portable measuring devices (data logging, time planning).
- Measuring Point Imaging for connecting photographs/images to measuring points.
- REST API, a web-based service enabling other resources, systems or devices to access Condmaster data for further processing or analysis.
- Access to the Condmaster program as a 'read only' web interface version from any PC running a modern web browser.
- SAP and AMOS links send alarm messages to the receiving software and accepts a work order number in return.
- Plant Performer compiles and visualizes statistics relating to technical and economic KPIs for display, evaluation, and printing in Condmaster.NET.
- Color Spectrum Overview, showing large numbers of spectrums over a longer period of time, thus providing a very good overall picture of machine condition development.
- Voice recording of comments connected to measuring points.
- Display and printout of all measuring results as graphics and lists.
- Creation of alarm messages and lists, statistics and reports.

Further modules can be added as needed (described on separate TD sheets).

Min. system requirements for Condmaster

- Windows 7 or later (**Windows 8 or later if SQL Server 2016 is installed on the same computer**)
- 1 GHz 32-bit (x86) or 64 bit (x64) processor
- 1 GB of RAM memory
- 15 GB free disc space
- Microsoft SQL Server 2016 or later

Note: *Microsoft SQL Server 2016 requires Windows 8 (64-bit) or later with at least 1.4 GHz CPU. Condmaster Entity Server (CES) requires 64-bit Windows. LinX (handling online systems) and CES require higher data performance.*

For more information and recommended system requirements, see Condmaster Ruby Installation and system administration manual, document no. 72260.

Part numbers

PRO350	Condmaster® Ruby, Platform, CD
PRO350-USB	Condmaster® Ruby, Platform, USB stick

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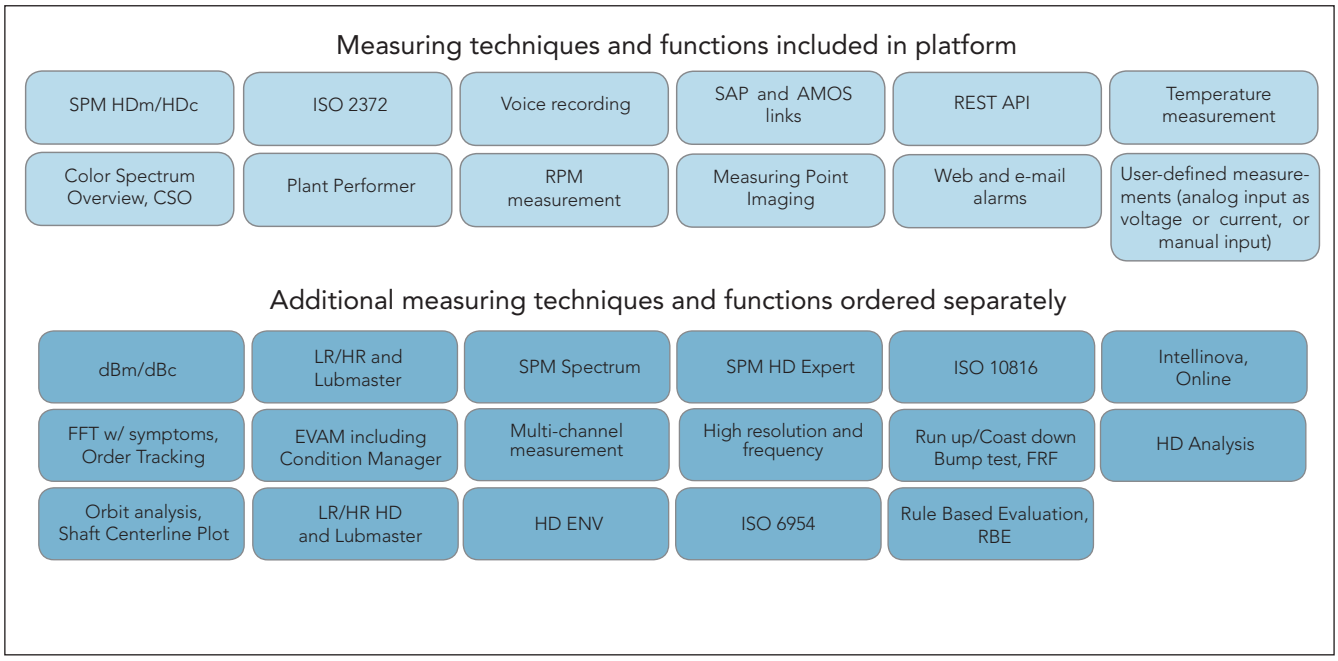
Condmaster®Ruby 2020 – Modules

PRELIMINARY



Condmaster®Ruby 2020 is modular. It can be tailored, in performance and price, to your selected hardware and technical requirements. Modules can be bought at any time as update files. Limited use (for Leonova Infinity and Diamond only) implies that credits are deducted each time the function is used in the measuring instrument.

TD sheet No.	Module	Art no. Unlimited use / Art no. Limited use***	Tester T30	Analyzer A30	Leonova Infinity	Leonova Emerald	Leonova Diamond	Intellinova Standard	Intellinova Compact	Intellinova Parallel EN
TD-583	Platform	PRO350 / - - -	●	●	●	●	●	●	●	●
TD-411	dBm/dBc	MOD130 / MOD230	●		●	●	●	●		
TD-412	LR/HR and Lubmaster	MOD131 / MOD231		●	●	●	●	●		
TD-413	SPM Spectrum	MOD132 / MOD232			●	●	●	●		
TD-414	SPM HD Expert	MOD195 / MOD295				●	●	●	●	●
TD-415	Vibration ISO 10816	MOD133 / MOD233			●	●	●	●	●	●
TD-416	FFT w/ symptoms, Order Tracking	MOD134 / MOD234	●*	●**	●	●	●	●	●	●
TD-417	EVAM incl. Condition Manager	MOD135 / MOD235	●*	●**	●	●	●	●	●	●
TD-419	Multi-channel measurements ******	MOD192 / - - -					●			●
TD-420	Run up/Coast down, Bump test, FRF	MOD137 / MOD237			●		●	●****	●****	
TD-421	Orbit analysis, Shaft Centerline Plot	MOD138 / MOD238			●*****		●	●*****		● *****
TD-422	High resolution and frequency ******	MOD194 / - - -					●			●
TD-424	Rule Based Evaluation, RBE	MOD181 / - - -	●	●	●	●	●	●	●	●
TD-427	Intellinova, Online	MOD187 / - - -						●	●	●
TD-451	Vibration Expert	MOD193 / - - -					●			
TD-452	Vibration Supreme	MOD197 / - - -				●				
TD-475	LR/HR HD and Lubmaster	MOD131+MOD195 / MOD231+MOD295				●	●	●	●	●
TD-485	Vibration ISO 6954	MOD198 / - - -					●			
TD-504	HD ENV	MOD199 / MOD299				●	●	●	●	●
TD-513	HD Analysis	MOD140 / MOD240				●	●	●	●	●

* T30-3 ** A30-3
*** Limited use for Leonova Diamond and Infinity only
**** Run up/Coast down only ***** Orbit analysis only
****** The number of measuring channels as well as the maximum resolution and frequency range depends on the measuring equipment.

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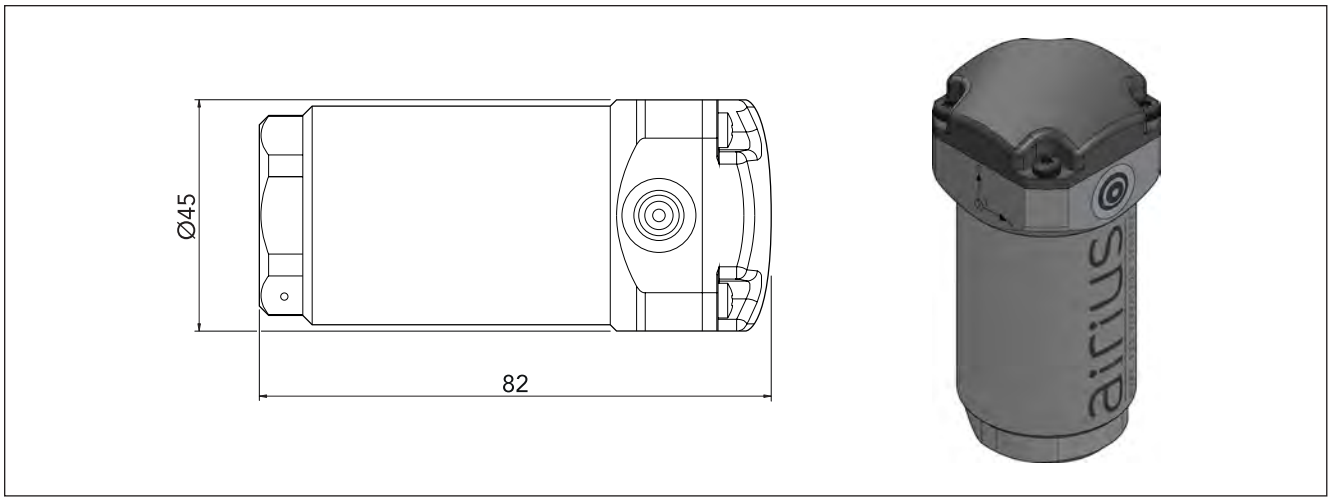
Airius – Wireless vibration sensor



Airius is a wireless, battery-powered sensor that performs a user-defined number of vibration measurements per day in the 10-1000 Hz or the 2-1000/10-5000 Hz frequency range. The MEMS (micro-electro-mechanical-systems) type sensor with digital output measures triaxial vibration and temperature.

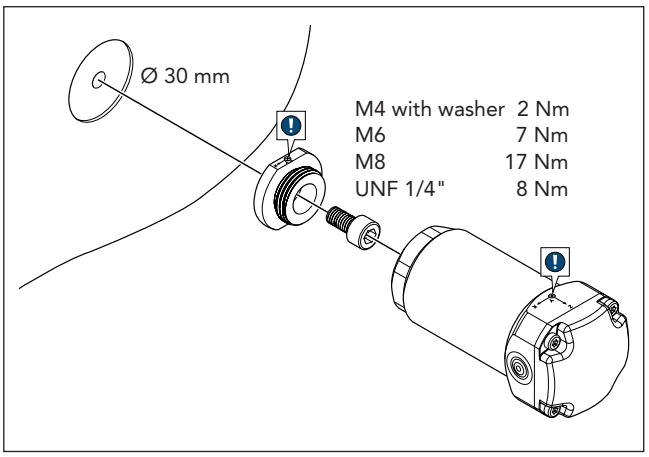
The vibration sensor is optimal for use on standard production equipment, such as pumps and fans. Airius provides warning of vibration-related problems, such as imbalance, misalignment, impeller and fan blade issues, resonance, and cavitation, as well as gear and bearing faults. The sensor is ideal wherever wireless transmission of vibration data is practical or a matter of safety, as in inaccessible machines or machines placed in hostile or risky environments.

The favorable choice of battery technology, along with the careful design, ensure four-year battery life at four measurements a day under ideal conditions.

Airius is compatible with both Condmaster.NET, the cloud-based application providing easy access to measurement data through a user-friendly interface, and the analysis and diagnostic software Condmaster Ruby.

The SPM Connect app, downloadable for mobile devices, is used to configure the parameters required to connect to Condmaster Entity Server (CES) or SPM Cloud. The app allows you to

- search for Airius vibration sensors via Bluetooth
- verify server connection
- set up connection to Wi-Fi and CES/SPM Cloud.



Technical specifications

Weight:	approx. 300 g
Power supply:	non-rechargeable 3.6 VDC Lithium
Frequency range:	10-1000 Hz or 2-1000/10-5000 Hz
Readings:	RMS, peak, peak-to-peak, crest, kurt, skew, temperature
Measurement range, temperature:	–40° to +85 °C (–40° to +185 °F) (accuracy +/– 2 °C)
Spectrum lines:	400, 800, 1600 lines
Operating temperature:	–40° to +85 °C (–40° to +185 °F)
Storage temperature:	–40° to +120 °C (–40° to +248 °F)
Maximum altitude:	2000 m
Condition evaluation:	ISO10816 Part 2, 3, 4 >600 rpm
Protection class:	IP69
Relative humidity:	0 to 100% (non-condensing)

Part numbers

AIR01-01 Airius vibration sensor, 10-1000 Hz
AIR01-10 Airius vibration sensor, 2-1000 Hz and 10-5000 Hz

Accessories

18470 Installation kit (installation foot, M4 screw, M4 washer, M6 screw)
18471 Installation kit (installation foot, M8 screw)

Spare parts

18472 Cover kit (cover, gasket, 4xM3 screws)
18449 Battery with cable for Airius

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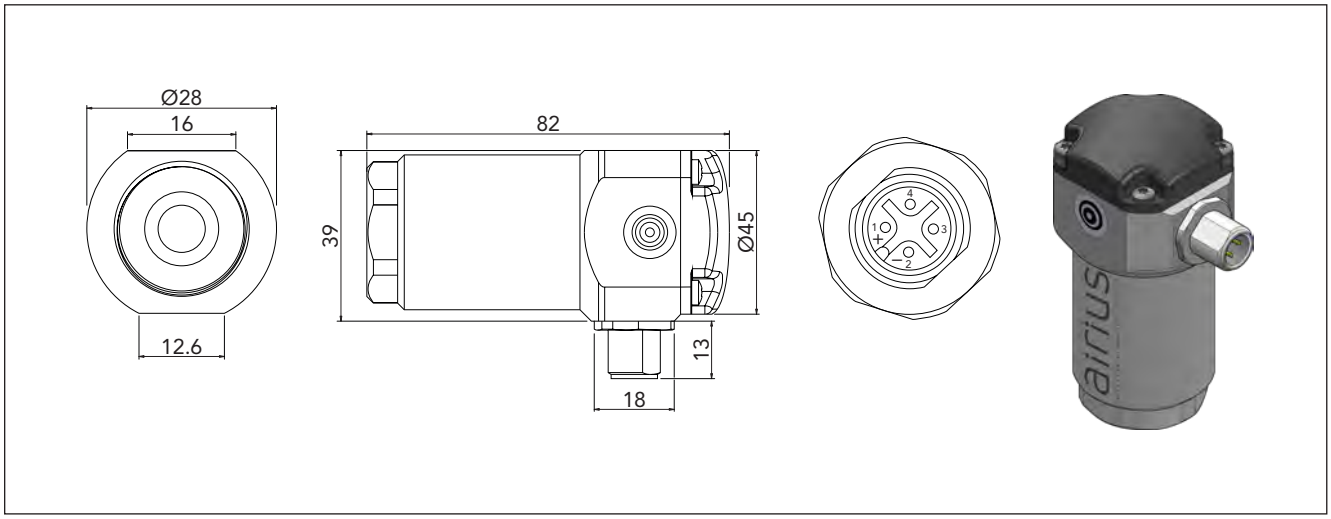
Airius – Wireless vibration sensor with external power



Airius is a wireless sensor that performs a user-defined number of vibration measurements per day in the 10-1000 Hz or the 2-1000/10-5000 Hz frequency range. The MEMS (micro-electro-mechanical-systems) type sensor with digital output measures triaxial vibration and temperature.

The vibration sensor is optimal for use on standard production equipment, such as pumps and fans. Airius provides warning of vibration-related problems, such as imbalance, misalignment, impeller and fan blade issues, resonance, and cavitation, as well as gear and bearing faults. The sensor is ideal wherever wireless transmission of vibration data is practical or a matter of safety, as in inaccessible machines or machines placed in hostile or risky environments.

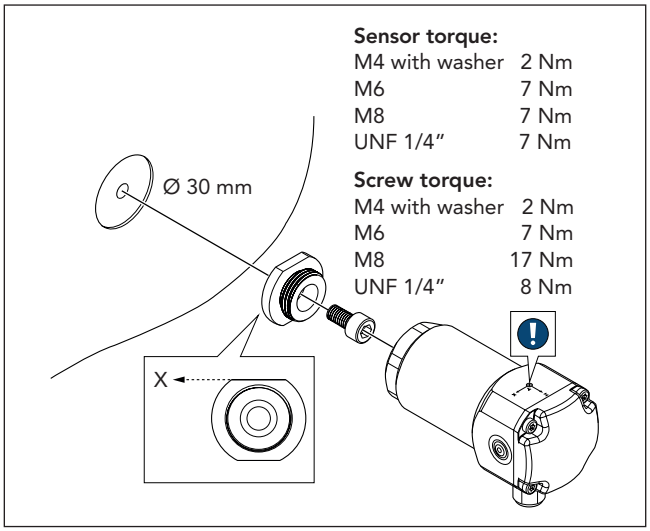
Airius is compatible with both Condmaster.NET, the cloud-based application providing easy access to measurement data through a user-friendly interface, and the analysis and diagnostic software Condmaster Ruby.

The SPM Connect app, downloadable for mobile devices, is used to configure the parameters required to connect to Condmaster Entity Server (CES) or SPM Cloud. The app allows you to

- search for Airius vibration sensors via Bluetooth
- verify server connection
- set up connection to Wi-Fi and CES/SPM Cloud.

Technical specifications

Material:	housing; Stainless acid proof steel Sandvik Grade:1802, EN:1.4523, cover; polyamide
Weight:	approx. 185 g
Power supply:	24 V DC (23 to 25 V)
Frequency range:	10-1000 Hz or 2-1000/10-5000 Hz
Readings:	RMS, peak, peak-to-peak, crest, kurt, skew, temperature
Measurement range, temperature:	–40° to +85 °C (–40° to +185 °F) (accuracy +/– 2 °C)
Spectrum lines:	400, 800, 1600 lines
Operating temperature:	–20° to +85 °C (–4° to +185 °F)
Storage temperature:	–40° to +120 °C (–40° to +248 °F)
Maximum altitude:	2000 m
Condition evaluation:	ISO10816 Part 2, 3, 4 >600 rpm



Protection class:	IP69
Relative humidity:	0 to 100% (non-condensing)
Wi-Fi:	802.11 b/g/n, 2.4 GHz
Wi-Fi Security:	WPA/WPA2 PSK/WPA2 Enterprise (PEAP-MSCHAPv2 and TTLS-MSCHAPv2 without certificates)
Bluetooth:	v4.2 BLE

Part numbers

AIR01-01-EP	Airius sensor, 10-1000 Hz
AIR01-10-EP	Airius sensor, 2-1000 Hz and 10-5000 Hz

Accessories

18470	Installation kit (installation foot, M4 screw, M4 washer, M6 screw)
18471	Installation kit (installation foot, M8 screw)
18549	Power supply Airius EP (incl. cable)

Spare parts

18472	Cover kit (cover, gasket, 4xM3 screws)

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