**CardVibro Air 2 Common Specification**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface</td>
<td>Wireless LAN: IEEE802.11b/g, In conformity to WiFi 12800 IEEE WPA/WPA2</td>
</tr>
<tr>
<td>Power Supply</td>
<td>2 pcs. of AAA battery</td>
</tr>
<tr>
<td>Consumption Current</td>
<td>Under measurement: (During Use of WiFi), about 50mA, under measurement: (Not Connected to PC), about 10mA</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>-25°C ~ 60°C (Guaranteed by attached battery), 0°C ~ 60°C (Guaranteed by external power source)</td>
</tr>
<tr>
<td>Ambient Humidity</td>
<td>30 ~ 90% No condensation</td>
</tr>
<tr>
<td>Sampling Frequency</td>
<td>Max. 76.8kHz</td>
</tr>
<tr>
<td>AD Resolution</td>
<td>16bit</td>
</tr>
<tr>
<td>Operational Tablet OS</td>
<td>Android3.2, Android4.1* only Android OS approved by IMV</td>
</tr>
<tr>
<td>Effective Measuring Frequency</td>
<td>2 ~ 20kHz</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>+5°C ~ +50°C (Guaranteed by attached battery)</td>
</tr>
<tr>
<td>Ambient Humidity</td>
<td>30 ~ 90% No condensation</td>
</tr>
<tr>
<td>Consumption Current</td>
<td>Under measurement (During Use of WiFi): about 10mA, Under measurement (Not Connected to PC): about 5mA</td>
</tr>
<tr>
<td>Power Supply</td>
<td>2 pcs. of AAA Battery</td>
</tr>
<tr>
<td>Built-in Memory Capacity</td>
<td>4Mbit × 16bank</td>
</tr>
<tr>
<td>Wireless Communication Mode</td>
<td>Infrastructure Mode, HS mode, Direct Connection</td>
</tr>
<tr>
<td>USB Interface</td>
<td>Visual COM port and Direct Connection</td>
</tr>
</tbody>
</table>

**CardVibro Air 2 Standard Type VM-2012**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass</td>
<td>About 150g</td>
</tr>
<tr>
<td>Size</td>
<td>42mm(D) × 40mm(W) × 89mm(H)</td>
</tr>
<tr>
<td>Voltage Input Port</td>
<td>±2.5V, +24V, -5V</td>
</tr>
<tr>
<td>Voltage Output Port</td>
<td>Voltage Output Sensor, ICP Sensor</td>
</tr>
<tr>
<td>Connecting Sensor</td>
<td>Connecting image of Low Frequency Vibration Measurement Pickup</td>
</tr>
<tr>
<td>Disp. Frequency Range</td>
<td>1kHz</td>
</tr>
<tr>
<td>Vel. Frequency Range</td>
<td>150Hz</td>
</tr>
<tr>
<td>Acc. Frequency Range</td>
<td>0.1Hz ~ 10kHz</td>
</tr>
<tr>
<td>Sensor</td>
<td>Piezoelectric Accelerometer</td>
</tr>
<tr>
<td>Maximum Measurement Acceleration</td>
<td>500m/s²</td>
</tr>
<tr>
<td>Built-in Memory Capacity</td>
<td>4Mbit × 16bank</td>
</tr>
<tr>
<td>Power Supply</td>
<td>2 pcs. of AAA Battery</td>
</tr>
<tr>
<td>Low Power Consumption</td>
<td>Operation with Android Tablet PC/ WiFi Wireless</td>
</tr>
<tr>
<td>High Speed Signal Response</td>
<td>Light and Compact Size</td>
</tr>
<tr>
<td>Low Power Consumption</td>
<td>WiFi Portable Vibrometer</td>
</tr>
</tbody>
</table>
Catch the Vibration

Wireless CardVibro Air 2 is available at any measuring situation.

Wildly vibrating place
Dangerous place
Narrow space
Partitioned place

2 choices of measuring methods

Direct Measurement
Hands-free Measurement

With dedicated sensor probe, it can measure vibration directly, and no need to worry about a cable pulled into a rotating machine with wireless Air2.

Hands-free measurement with a magnet
*Small magnet: Option

4 features of CardVibro Air 2

Operation with Android Tablet PC
WiFi Wireless
Light and Compact Size
Low Power Consumption
High Speed Signal Response

Robot arm
Bridge
Narrow space between machines
Clean Room

CardVibro Air 2
Us eful F unctions

Simultaneous Measurement
Support of Quick and Easy Measurement
There are many functions to express characteristics of vibration. However, it is necessary for the conventional vibrometers that same point is measured plural times switching objective functions one by one. CardVibro Air 2 which has simultaneous measurement function can measure Displacement, Velocity and Acceleration. Acceleration Envelope for bearing condition Assessment is also simultaneously measurable by just pressing on the measurement start key.

FFT Analysis
For Investigation of Cause of Vibration
If the measured magnitude of vibration is too large, the cause investigation by FFT is recommended. CardVibro Air 2 is possible to perform Frequency Analysis only by the minimum condition setting. Try fine analysis with 12800 lines on the small body, CardVibro Air2 could be your strong handheld weapon to root out the harmful vibration!

Waveform Observation
For Investigation of Cause of Vibration
Status change of vibration can be known by looking. Maximum 30 minutes of waveform can be recorded.

Data Saving
Important Basic Function
All data acquired can be saved if the Android tablet PC is compatible to the storage card, such as SD card. Data can be transferred to PC for more efficient handling by using data management software.

Evaluation Function
Evaluation at the site
You may want to make evaluation of condition of the rotational machineries as blowers or motors at the site by just measuring their vibrations. With CardVibro Air 2, such evaluation is possible with the use of the standard for the Vibration Severity ISO-10816 (JIS-B-0906) and the criteria set by the world largest bearing manufacturer SKF and these functions help you make easy and quick judgement.

Monitoring Function
Real-time Monitoring
Almost real-time monitoring of waveform data and FFT is possible.

Route Setting Function
The next point to be measured will be displayed as setting.

High Speed Signal Response
Time to display data is substantially reduced during OA value measuring.

Other Features of CardVibro Air 2
High capacity memory of built-in 4Mbit
Practical Waterproof
Can attach a neck strap at the top

Useful Functions

High speed signal communication with WiFi
Measurable in Android OS

Remote measuring with WiFi

Waveform Display Screen

Main Menu Screen
OA Value Measurement Screen
Measuring Point Setting Screen

A standard model of New Era emerged changing the common sense of vibrometer.

Useful Functions

High speed signal communication with WiFi
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Main Menu Screen
OA Value Measurement Screen
Measuring Point Setting Screen

A standard model of New Era emerged changing the common sense of vibrometer.
The common sense of vibrometer.

- **Light and Compact Size**
- **Low Power Consumption**

### Light and Compact Size

- Weight: about 145g (Including a sensor)
- Size: 89mm x 89mm x 42mm
- Compact design and fits easily into a breast pocket

### Continuous 6 hour operation with 2 AAA batteries

- 6 hour operation
- Cable wired measurement is also possible.
- External connector type is compatible to 2 optional pickups.
- Rechargeable with USB connection

### Data Management Software

- **Feature**
  - Data Management Software DB-2012 is a software to manage the measured data practically on the P.C.
  - The data are transferred through USB to P.C. using SQ Lite as data base. With the data acquired by CardVibro Air 2, it is able to manage and display Trend Plots, FFT Plots and Waveform.

- **Features**
  - Using SQ Lite.
  - Data transfer or synchronization between tablet PC and P.C. is easily available.
  - Measurement Spot Management
  - Trend Plot
  - Waveform Display
  - FFT Analysis Function
  - FFT data, waveform data are obtained as CSV format output.

- **Requirements <Compatible P.C.>**
  - OS: Windows XP SP3, Windows 7
  - Display resolution: More than 800 x 600 dots
  - Interface: USB
  - Software: Microsoft Excel 2010 is necessary to use printer function.

*only for tablet with USB host device*