

iQunet.® Installation Instructions

Installation Instruction for Condition Monitoring with
Cable Powered Wireless Vibration Sensors



Sequence of installation steps

1. Install and power the iQunet Server
2. Connect to the iQunet Server web interface
3. Install the cable set (M8)
4. Install the failover battery
5. Install the sensor mechanically on the asset (in specified range)
6. Launch the sensor measurements in the web interface

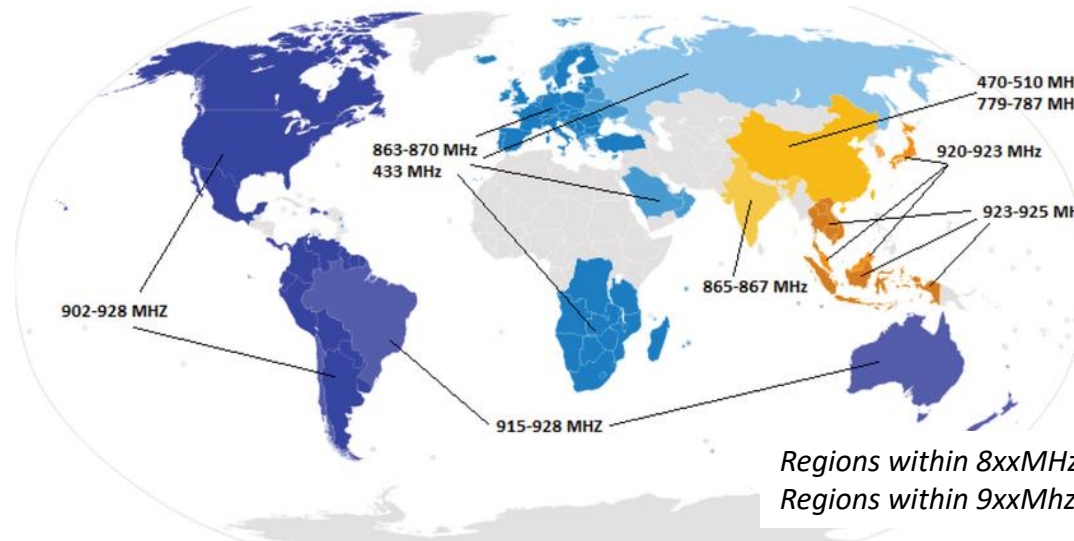


Installation steps (cont.)

1. Install and power the iQunet Server

For full set up and installation instructions please visit <https://iqunet.com/resources/user-manuals/>

- Mount the iQunet Server on DIN rail (35mm). Mounting clips included.
- Install the External Dual Band **Wifi Antenna** hand tight only on the WiFi antenna connector.
- Install the External **LoRa antenna** hand tight **only** on the LORA antenna connector.
- Power with 8-28VDC / 18W max. power consumption
- Do NOT yet plug in a network cable or LTE dongle if ordered



iQunet Server:

SKU:

SERV199498-IPC-ED1432-8A

SERV199499-IPC-ED1432-9A

Installation steps (cont.)

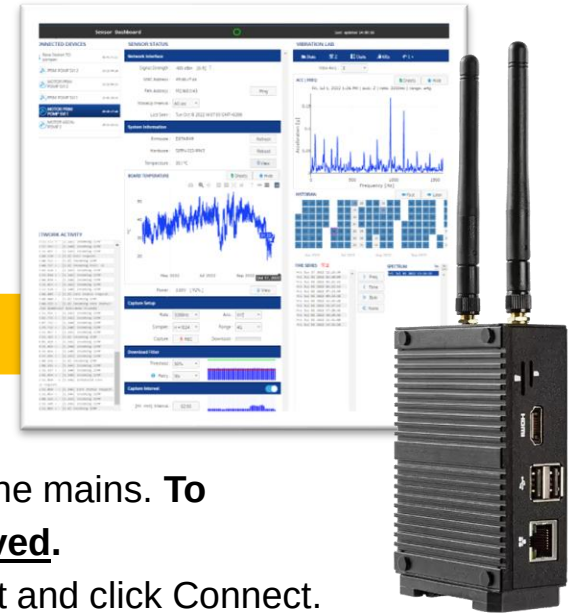
2. Connect to the iQunet Server web interface (via hotspot or WebRTC)

Hotspot:

1. A WiFi hotspot is automatically created after 90 seconds once the iQunet Server is connected to the mains. **To activate the hotspot, the ethernet cable must be unplugged and any USB LTE dongle removed.**
2. Select the hotspot (SERN-xxxxxxxxxxx) in the network center on your PC, mobile phone or tablet and click Connect. The hotspot's password is the Sensor Proxy ID (server-xxxxxxx). The Sensor Proxy ID is provided by iQunet.
3. Open a new browser page. Browse to 192.168.42.1:8000/dashboard/app to open the iQunet Sensor Dashboard.

WebRTC:

1. Install a network safely **connected to internet** by using the above Hotspot functionality in the “Wired” or “Wifi” tab of the dashboard.
2. **Alternatively** plug in the USB-LTE dongle into the USB port. LTE connection is made upon a steady green light is available on the LTE dongle.
3. Connect your PC to the internet. Surf to **connect.iqunet.com**. Log in with your Google account or create a new account using your email address.
4. Click on “Add Server Node”. Enter the Sensor Proxy ID (server-xxxxxxx) and provide an alias name for the Server. Click “Save”. The Sensor Proxy ID is provided by iQunet.
5. Click on the created server node to open the iQunet Sensor Dashboard.



Installation steps (cont.)

3. Install the M8 power cable set



Wireless Cable Powered Vibration sensor:

SKU: IVIB161410-24V-PWR

Standard M8 Cable Set (IP68):

SKU: ACCS616210-M8-5MTR

SKU: ACCS616211-M8-10MTR

SKU: ACCS616212-M8-15MTR

SKU: ACCS616213-M8-20MTR

(other lengths on demand)

Installation steps (cont.)

3. Install the M8 power cable set

a) power from any existing local DC source

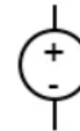


Consumption: 10mA max.



1 = brown: + (Pos)
3 = blue: - (Neg)
4 = black: not connected

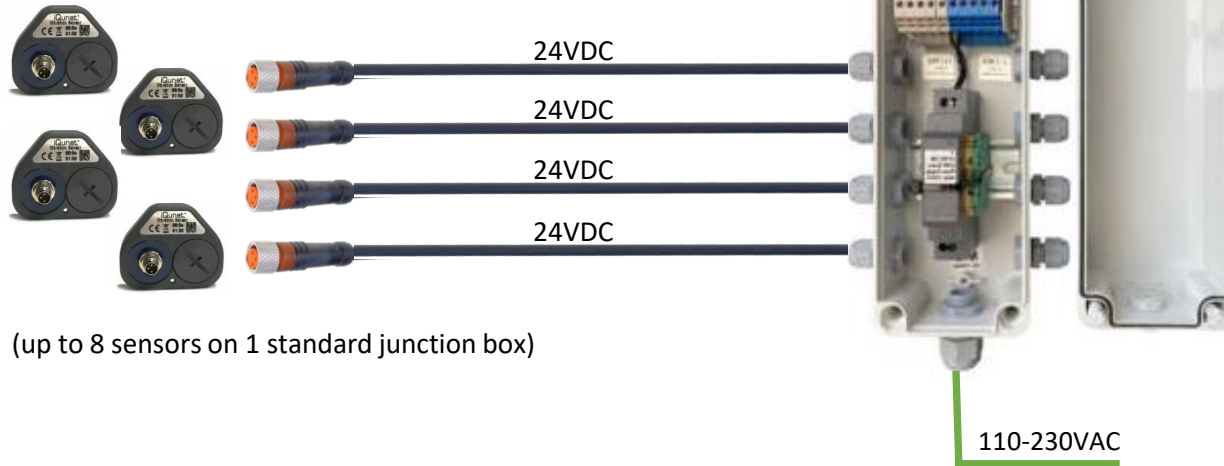
Local
6VDC ~ 60VDC
DC voltage



Installation steps (cont.)

3. Install the M8 power cable set

b) power from Junction Box



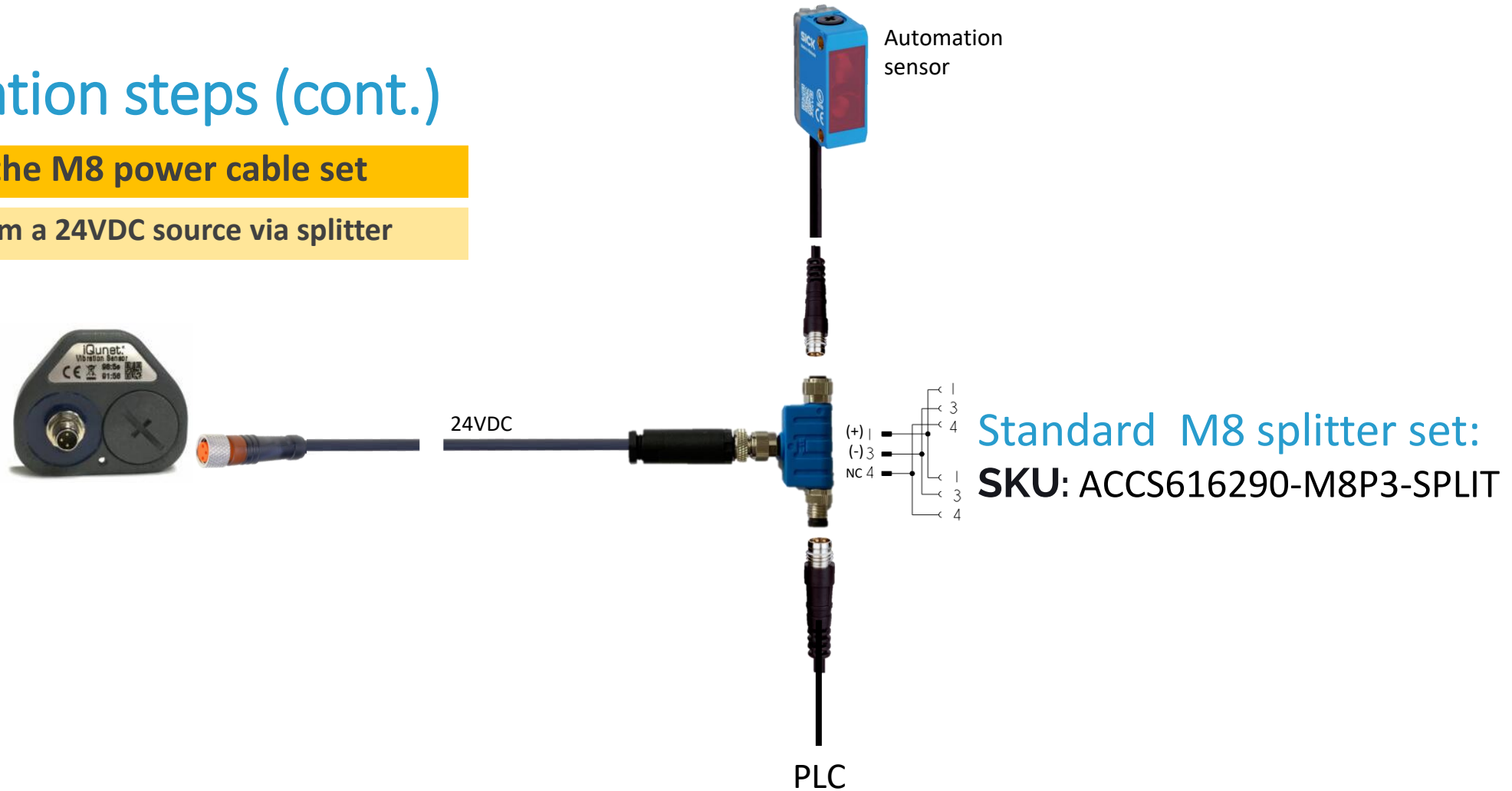
(up to 8 sensors on 1 standard junction box)

Standard **8-input Power Junction Box:**
SKU: ACCS617400-JUN8-IN000

Installation steps (cont.)

3. Install the M8 power cable set

c) power from a 24VDC source via splitter



Installation steps (cont.)

4. Install the failover battery



Standard Battery Set (IP68):
SKU: ACCS602010-2032-IP68

iQunet® Battery Installation Instructions (Cont.):

Standard Battery Set (IP68): **SKU: ACCS602010-2032-IP68**

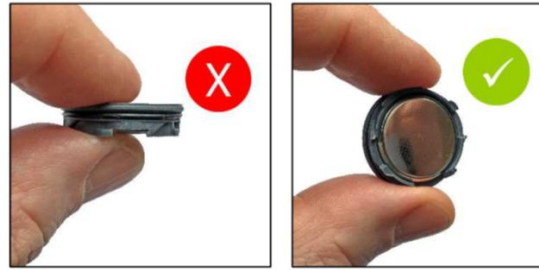
1

If not yet installed, put the CR2032 batteries in the right position in the (magnetic) holder.



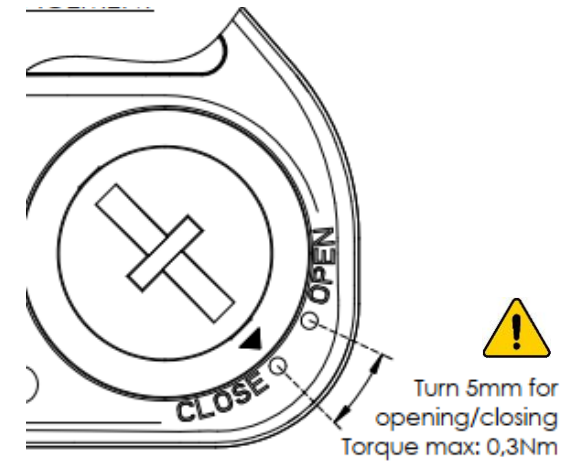
2

Avoid touching the bare batteries surfaces inside the holders with bare fingers (leaving skin conductive residues over the battery poles)



3

Insert the battery holders **perpendicularly** into the sensor compartment with the **arrow** on the holder pointing to the "open" position. Gently push the holder down and carefully rotate the arrow on the holder from the open to the close position ($\pm 5\text{mm}$; Torque max **0,3Nm**).



CAUTION: Carefully read the instruction manual before using the sensor.

When inserting the battery, point the arrow (►) on the battery holder to the "open"-position dot.

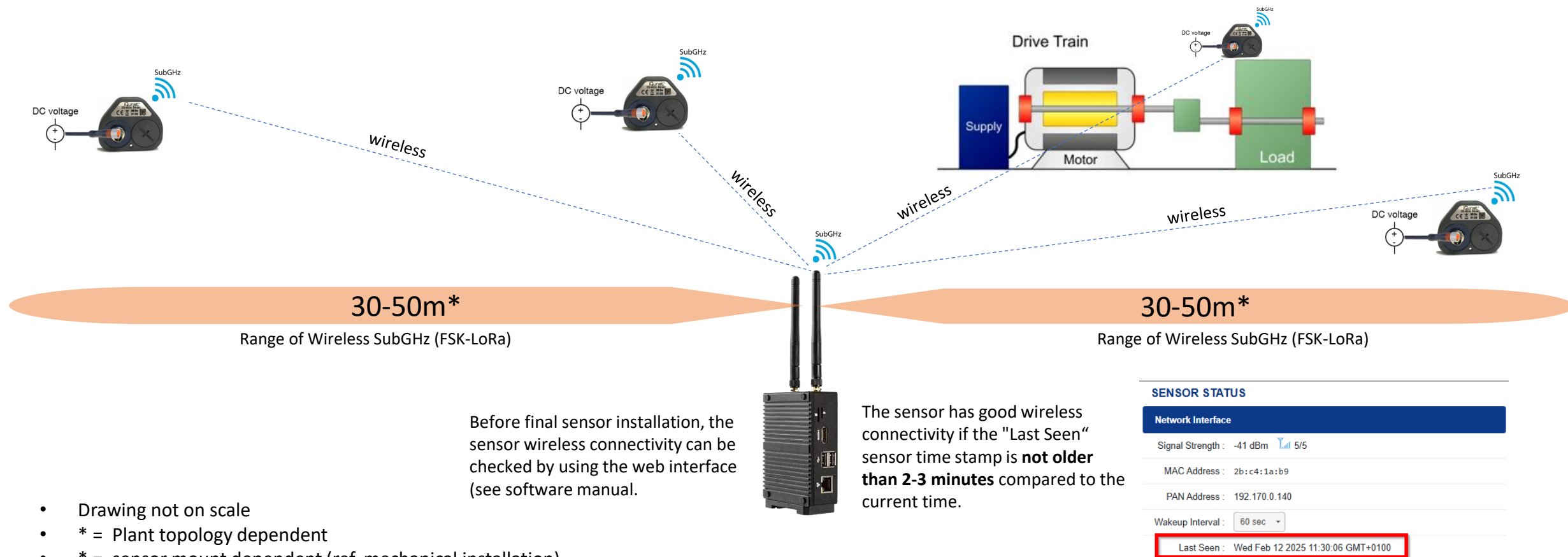
Inserting the battery in another position could harm the sensor and will void warranty of the sensor.

Do not touch the bare battery surfaces when inserting the battery into the battery holder to maximize battery lifetime.

- Easy Replaceable with 1x **standard CR2032** battery (also known as ANSI / NEDA-5004LC or IEC-CR2032)
- Easy onsite battery **replacement in 60 sec.**

Installation steps (cont.)

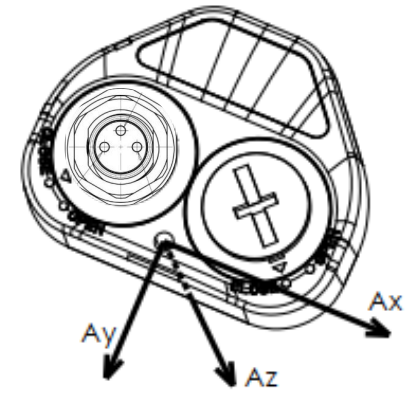
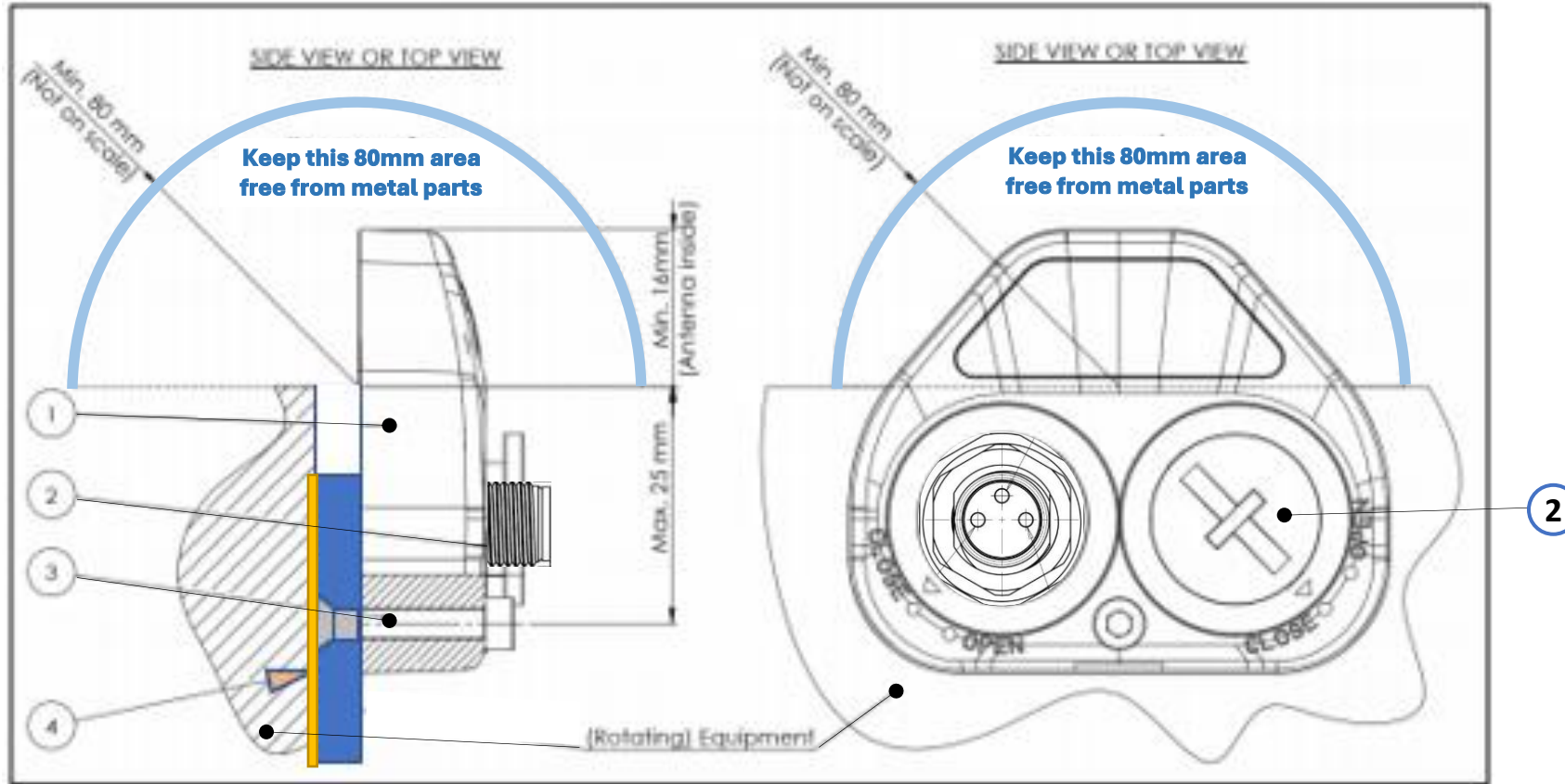
4. Install the sensor mechanically on the asset (in specified range)



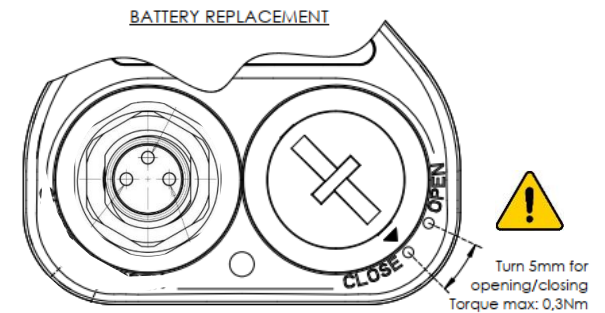
- Drawing not on scale
- * = Plant topology dependent
- * = sensor mount dependent (ref. mechanical installation)
- Line of Sight **not** required

iQunet.® Sensor Mounting **WITH** Magnet

Mechanical installation instructions



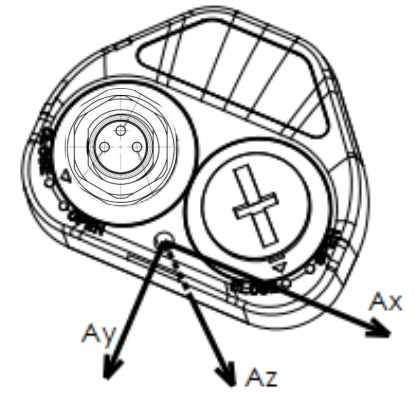
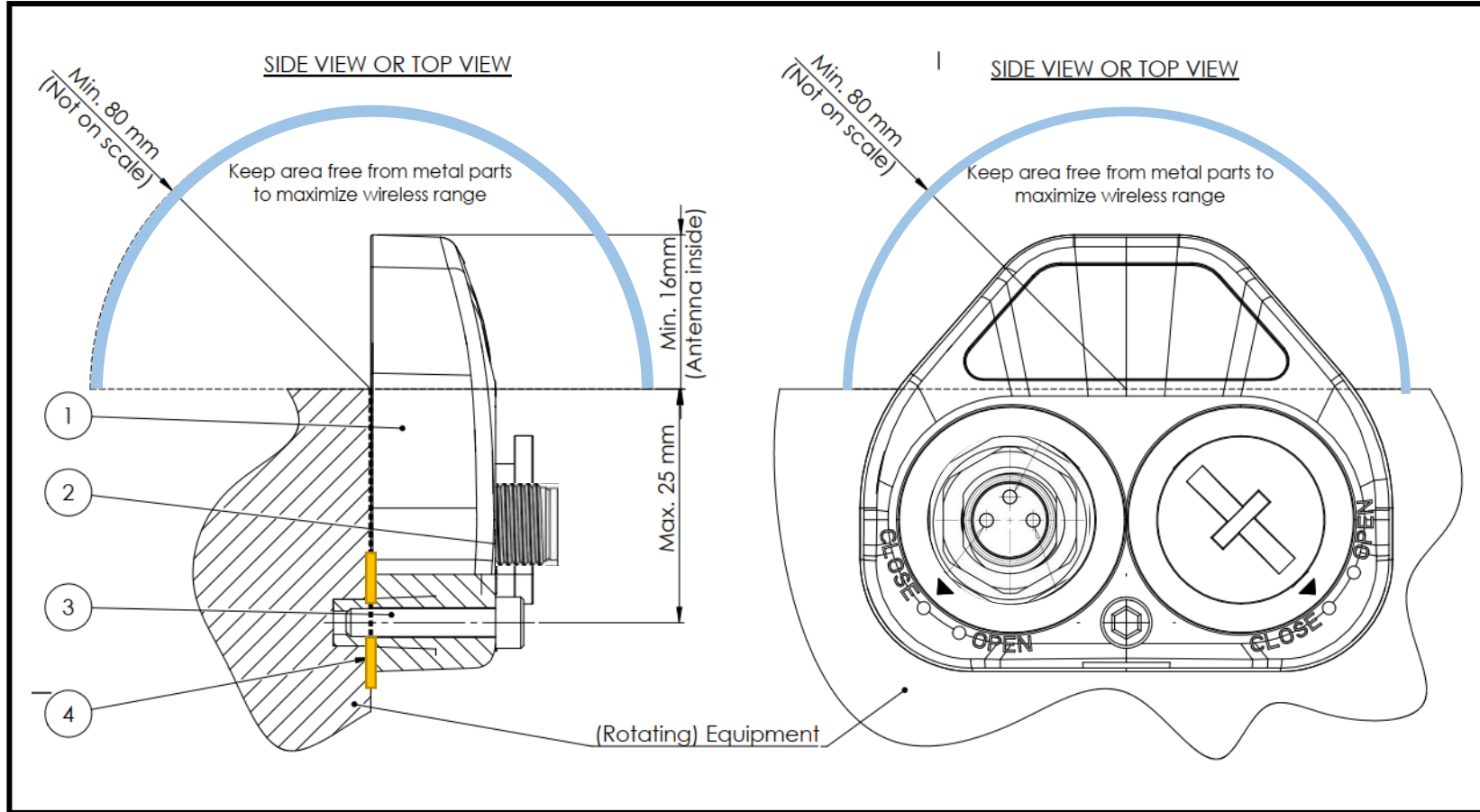
It is recommended to mount the sensor aligned with vertical, horizontal and axial axis if possible.



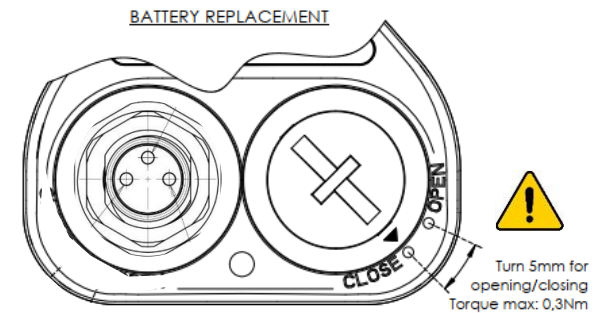
- ① Wireless iQunet Sensor (SKU: IVIB161410-24V-PWR)
- ② Battery holder + battery (SKU: ACCS602010-2032-IP68)
- ③ Magnet incl. magnet mounting set (SKU: ACCS622010-MAGN-3230)
- ④ **RECOMMENDED:** Epoxy – 5 mm gap filling (SKU: ACCS612010-50ML-EPXY)

iQunet.[®] Sensor Mounting **WITHOUT** Magnet

Mechanical installation instructions



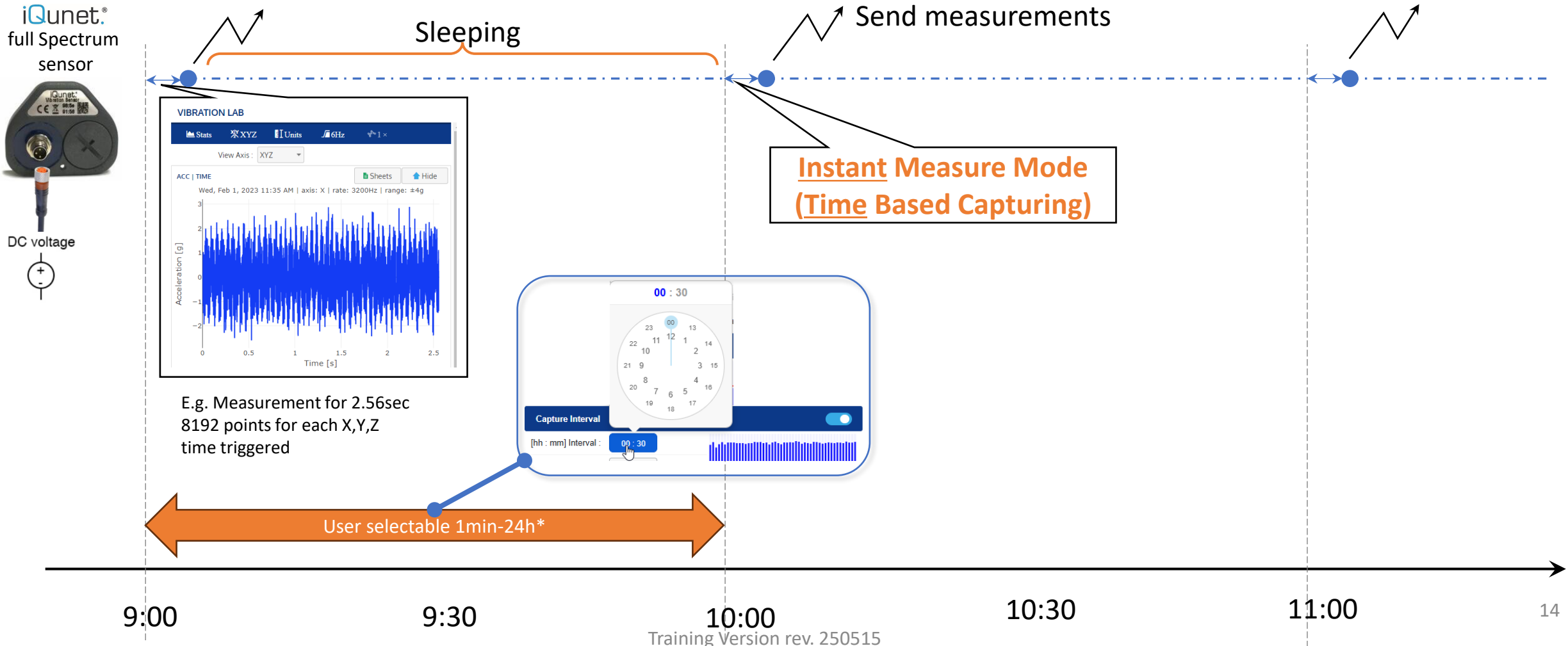
It is recommended to mount the sensor aligned with vertical, horizontal and axial axis if possible.



- 1 Wireless iQunet Sensor (SKU: IVIB161410-24V-PWR)
- 2 Battery holder + battery (SKU: ACCS602010-2032-IP68)
- 3 Mounting Screw set (SKU: ACCS611010-SSM3-X20)
- 4 **RECOMMENDED: Epoxy – 5 mm gap filling** (SKU: ACCS612010-50ML-EPXY)

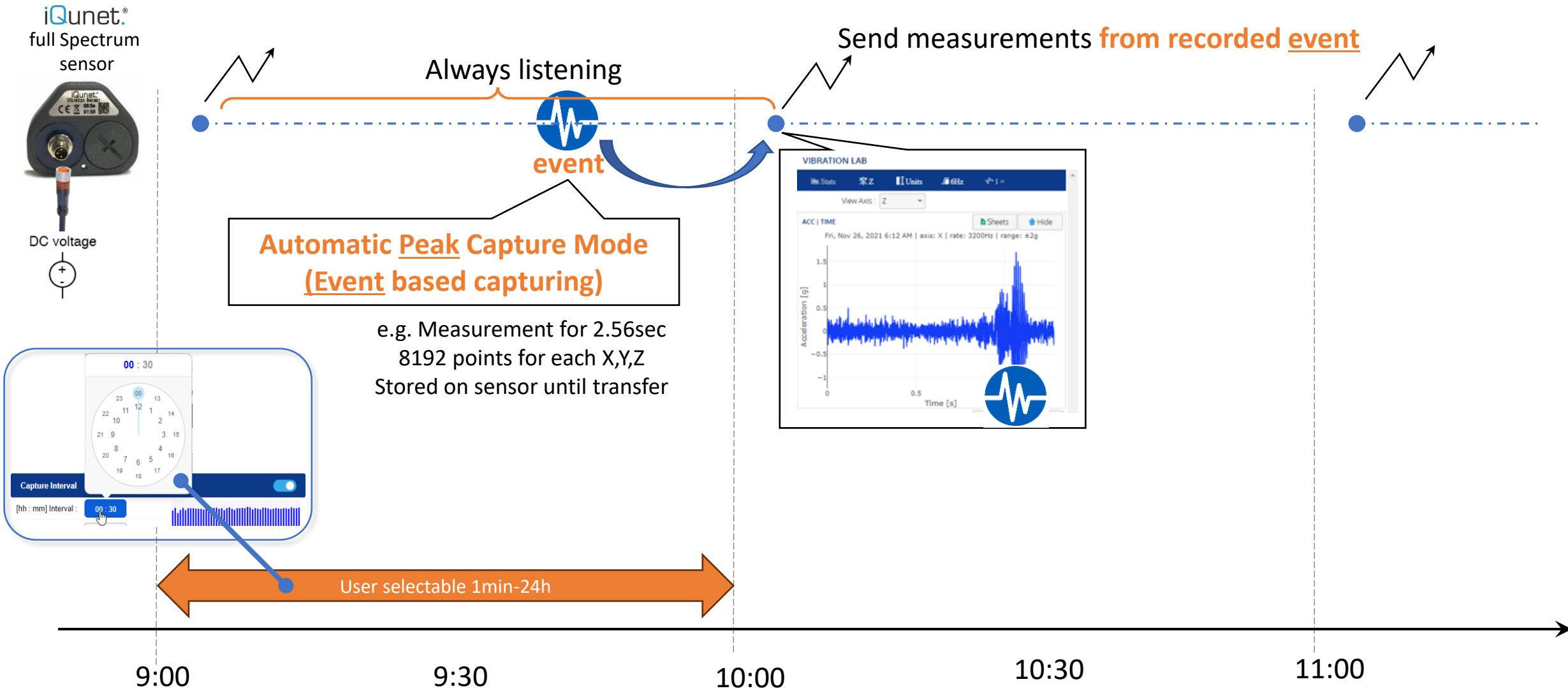
Installation steps (cont.)

5. Launch the automatic sensor measurements in the web interface – a) **INSTANT MODE**

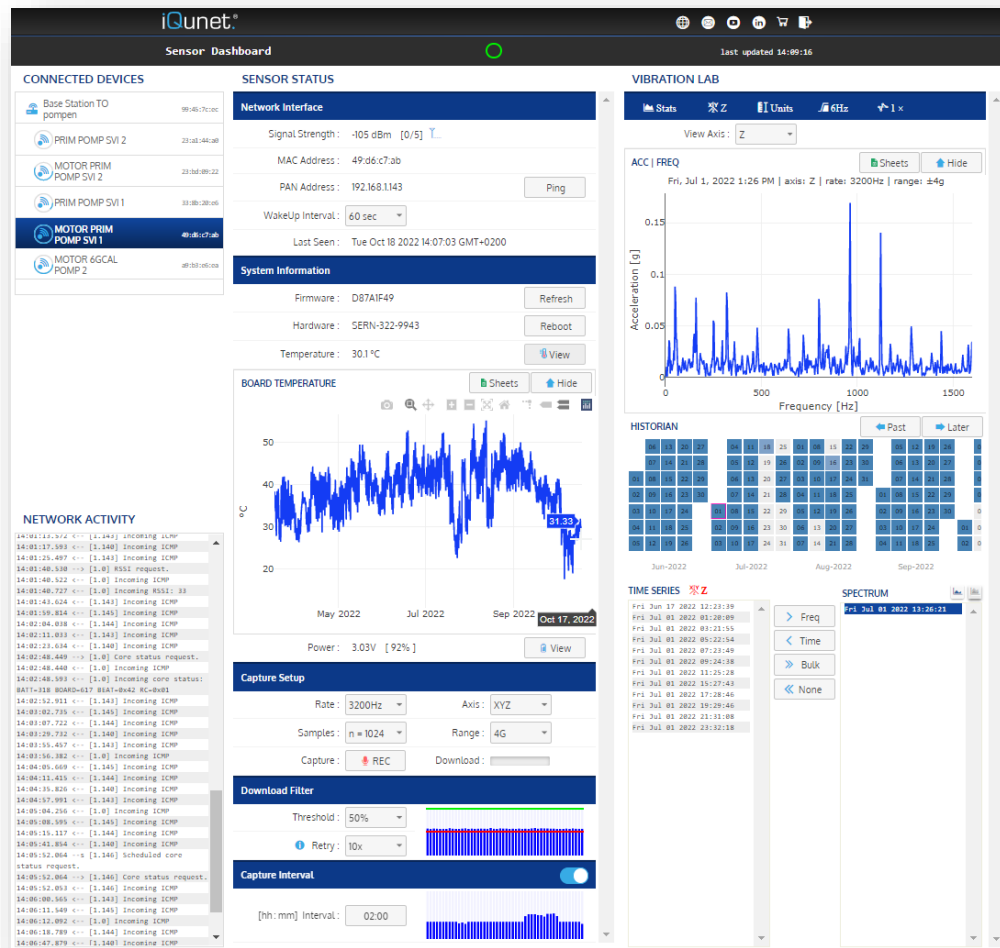


Installation steps (cont.)

5. Launch the automatic sensor measurements in the web interface – b) PEAK MODE



For Software Manuals, goto iQunet.com/resources/user-manuals/



Sensor management & Analytics Dashboards

- Standard included
- General sensor information and overview
- Sensor Status information
 - Connectivity
 - Historical temperature graph
 - Historical battery level graph
- Capture setup pane
- Capture interval setup pane
- Sensor download threshold setup pane
- Vibration / current waveform Analytics pane (incl. historical data)
 - Time Series Lab
 - velocity and acceleration selection
 - HP filter settings
 - Time series graph
 - FFT graph
 - 3D FFT plot
 - Statistics
 - velocity and acceleration selection
 - HP filter settings
 - RMS trend graph
 - Kurtosis trend graph



All above OPC UA (historical) node data is free accessible!

