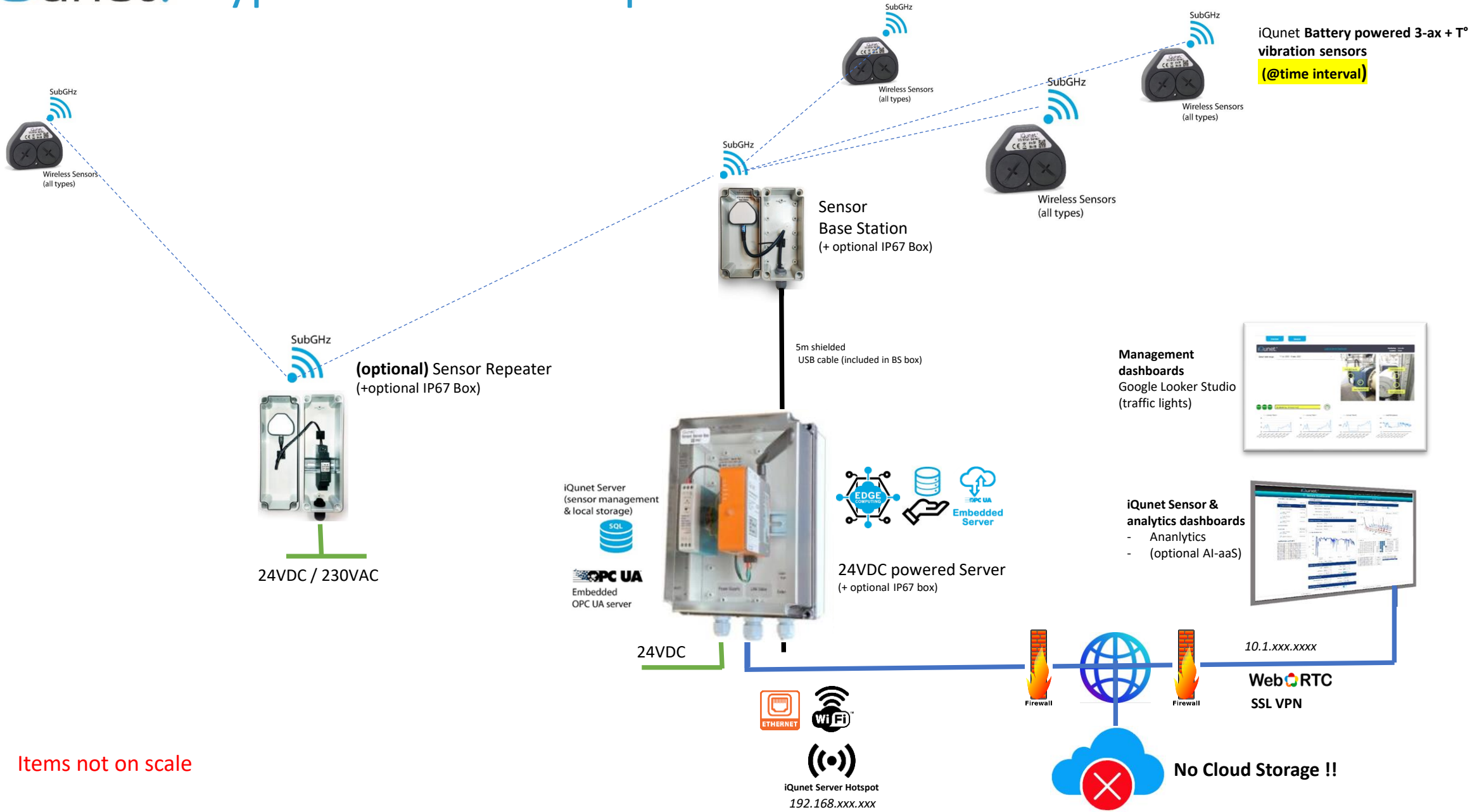# iQunet architecture

Typical setup with

Battery Powered

<u>Wireless</u> Vibriation Sensors

(Time interval-based measurements)
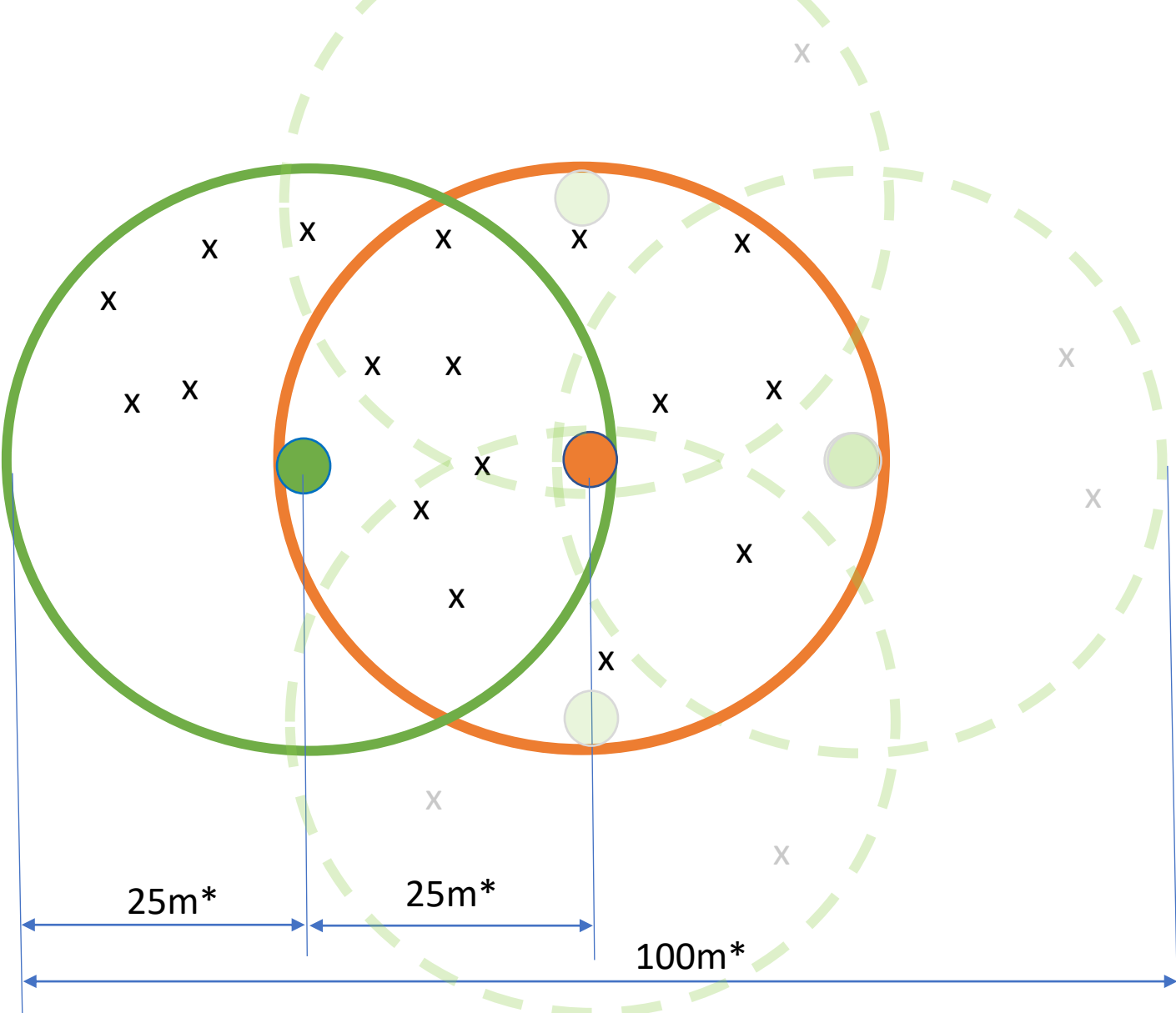
SubGHz

Wireless Sensors
(all types)

iQunet. Typical Sensor Setup

SubGHz

SubGHz

SubGHz

SubGHz

iQunet **Battery powered 3-ax + T° vibration sensors** (@time interval)

SubGHz
Wireless Sensors (all types)

SubGHz
Wireless Sensors (all types)

SubGHz
Wireless Sensors (all types)

Wireless Sensors (all types)

Wireless Sensors (all types)

Sensor Base Station (+ optional IP67 Box)

5m shielded USB cable (included in BS box)

SubGHz

(optional) Sensor Repeater (+optional IP67 Box)

24VDC / 230VAC

Management dashboards
Google Looker Studio (traffic lights)

iQunet Server (sensor management & local storage)

SQL

EDGE COMPUTING

Embedded Server

OPC UA

iQunet Sensor & analytics dashboards
- Ananlytics
- (optional AI-aaS)

Embedded OPC UA server

24VDC powered Server (+ optional IP67 box)

24VDC

Firewall

Firewall

10.1.xxx.xxxx

WebRTC
SSL VPN

ETHERNET   Wi-Fi

Items not on scale

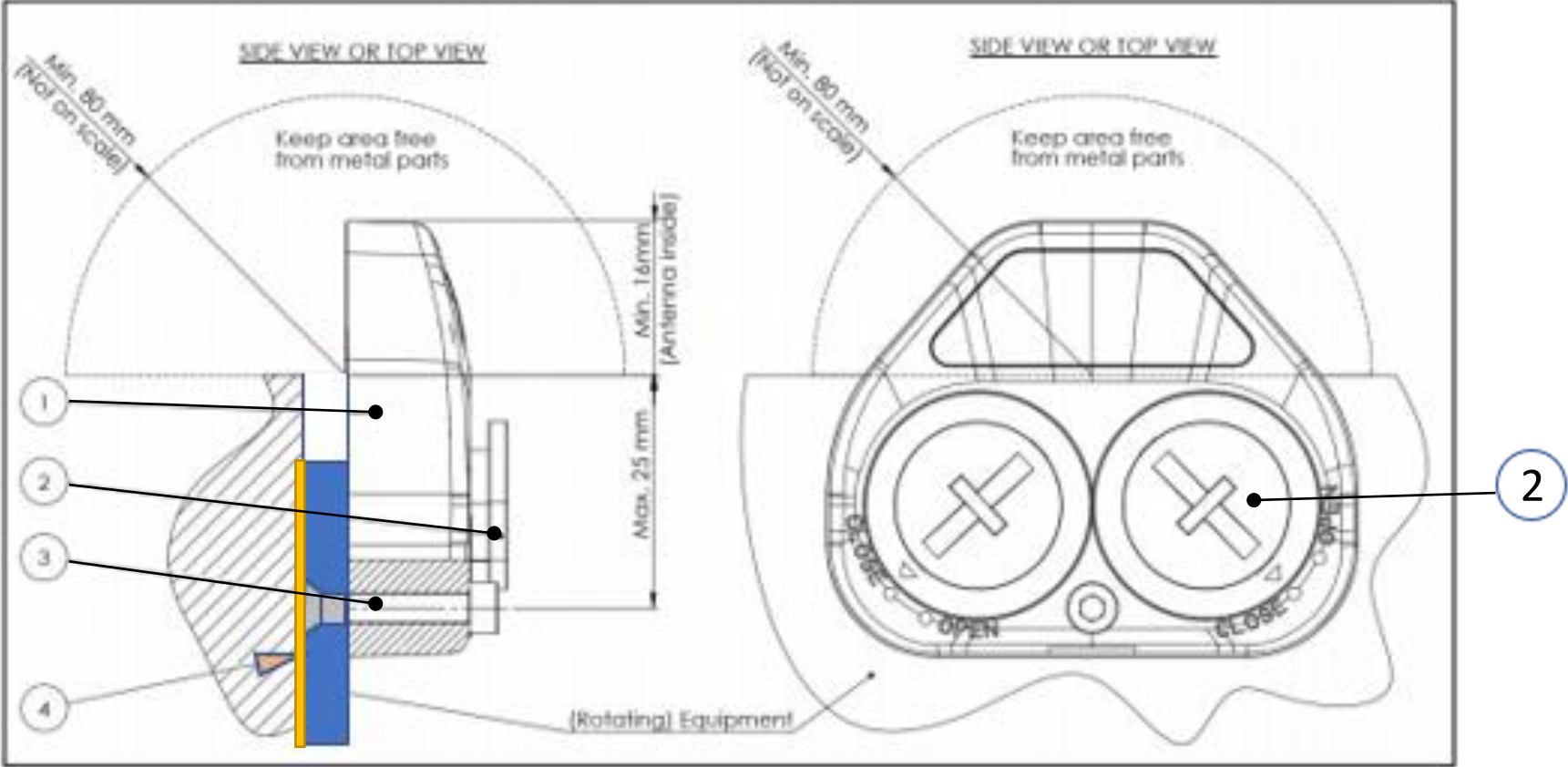iQunet Server Hotspot
192.168.xxx.xxx

No Cloud Storage !!

iQunet.® Typical Sensor Range and Layout*

Legend:
- Sensor Base Station (+ iQunet Server)
- Sensor Repeater
- x Sensor
- Possible extensions (Repeaters)

25m* 25m*

100m*

(*) Radio ranges are indicative. Plant topology like walls, ceiling, metal covers and machines could influence the radio range **positive** or **negative**. Mounting of the sensors and sensor network components shall be made according to iQunet instructions.

iQunet.® Typical Sensor Mounting

Magnet

④ Epoxy – 5 mm gap filling – high hardness

② Battery holder IP68

1

2

3

Installation instructions: ACCS604110-HOLDER-MAX

1

2

3

4

Not included

Type/IEC: CR123A / CR17345 (industrial)
Capacity: >1450mA
Non rechargeable type only !
System: Li-MnO$_2$
Recommended brand: VARTA

CAUTION: insert the batteries with the **narrow rib** located to the dot indicating the "open" position as marked on the outside of the sensor. **INSERTING THE BATTERY IN ANOTHER POSITION WILL HARM THE SENSOR AND WILL VOID WARRANTY.** The battery holder shall then, manually, be gently turned **clockwise** until the dot indicating the "close" position is reached. **Max. Torque: 0.3 Nm. (Hand tight only)** Gently slide the white clips over the **wide rib** of the 2 battery holders to secure the batteries in the sensor. The white **clips must always be installed** when the sensor is in use.