

# **USER MANUAL**KINEXON Receiver (Anchor)

**Indoor Application**Version 1.7





# KINEXON RECEIVER

The KINEXON Anchors are reference points for the tracking sensors that are positioned around a desired area. They send and receive signals from the sensors and transmit the information to the Edge server in real-time.

## **SPECIFICATIONS**

Material ABS+PC blend
Dimensions 130 x 130 x 45 mm

Weight 270 g (incl. antennas, without battery)

Power Supply Battery

PoE (48V, 6.5W)

Cable/Side contacts (12-24 V, induces charging)

Battery Lifetime 5.0 hours (active, two channels)

6.5 hours (active, one channel)

15 days (sleep)

Charging 4 hours (100%), 2 hours (50%)
Temperature -25 - 85 °C (no battery inserted)

Communication 2.4/5 GHz (Wifi)

3.23738-6.81013 GHz (UWB)

100Base-TX Ethernet



Please use only the following types of batteries (supplied by KINEXON). The respective temperature limits need to be respected:

BATTERY	Operational mode	Temperature range (A-08 with battery)
Keepower P1834J	Charging	0°C to +30°C
	Non-charging	-20°C to +50°C

#### **RECEIVER MOUNTING**

The KINEXON Receiver will only be placed indoors, where it will be usually mounted on walls or on tripods. KINEXON offers dedicated mounting mechanisms. Alternatively, the Receivers can be mounted on tripods in case that mounting on walls is not possible.



#### **REGULATORY AND LEGAL INFORMATION**

The KINEXON Receiver has been designed to be in compliance with both the U.S. FCC Part 15 subpart F regulations, sections 15.517 and 15.521 and with the European Union ETSI EN 302 065 standards. Two different versions of the KINEXON Receiver are available, one version supports the FCC emissions mask (Region 1) and the second supports the ETSI standard mask (Region 2).

#### **DISCLAIMER**

The information in this document is subject to change without notice. KINEXON GmbH assumes no responsibility for inaccuracies or omissions and specifically disclaims any liabilities, losses, or risks, personal or otherwise, incurred as a consequence, directly or indirectly, of the use or application of any of the contents of this document. For the latest documentation, contact KINEXON GmbH.

#### **INTENDED USE**

This manual describes the setup and use of the KINEXON Receiver. Use this product only for the purpose it was designed for.

#### **ANTENNA SELECTION**

The KINEXON anchor has been approved by the FCC under FCC ID: 2ALC5-KNX-IREC2 to operate with the antenna types listed below with the maximum permissible gain for each antenna type indicated. Antenna types not included in this list or having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

#### CERTIFIED ANTENNA TYPES

Antenna	Gain
Omni	4,15 dBi
Directional	9 dBi

The KINEXON anchor comes preconfigured with the correct firmware for the antenna it has been shipped with which sets the appropriate output power and channel selection for that antenna. It is not possible to change that firmware configuration by the user. Exchanging the antenna to one with a higher gain is not permitted.

#### **FCC COMPLIANCE**

This device complies with 47 CFR Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device may not be employed for the operation of toys. Operation onboard an aircraft, a ship or a satellite is prohibited.

*Note:* This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **IMPORTANT NOTICE**

This equipment may only be operated indoors. Operation outdoors is in violation of 47 U.S.C. 301 and could subject the operator to serious legal penalties.

At any time, a minimum separation of 20 cm must be maintained from the operating device and any person or persons. The KINEXON Receiver will only operate (i.e. transmit UWB signals) when activated within an indoor KINEXON network. This network needs to be professionally installed, and must be configured to cover only the volume indoors, preventing the KINEXON Receiver from emitting UWB signals outdoors. Contact KINEXON GmbH if you are unsure about the extent of coverage of your network system.

#### **RF EXPOSURE NOTICE**

This device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves adopted by the FCC. These limits include a substantial safety margin design to assure the safety of all persons, regardless of age and health. The radio wave exposure guidelines use a unit of measurement known as the Specific Absorption Rate, or SAR. SAR levels have been computed for the transmitters in this device and have been found to be below FCC limits.



### **SAFETY INFORMATION**

- The device is intended to be supplied from a Limited Power Source (LPS) whose power consumption should not exceed 40 VA and current rating of overcurrent protective device should not exceed 2.5 A.
- Read and follow all instructions before using the KINEXON Receiver.
- Never open the case of the KINEXON Receiver. There are no user serviceable parts or replaceable parts inside the case.
- Do not use the KINEXON Receiver if it has been damaged.

