

# **IoA - IoT for Antennas**



Attach & Monitor - It's that simple

**loA - loT for Antennas** is an loT antenna sensor module that monitors alignment in three dimensions: azimuth, tilt, and roll. loA utilizes LTE CAT-M1/NB-loT to communicate and alert of undesired changes to all antennas being monitored.



# Real-Time Antenna Alignment Monitoring

loA offers real-time antenna alignment monitoring on all wireless network antenna arrays. Data captured with loA's patented monitoring technology is made available over the cloud, allowing operators to remotely view the history of all physical antenna alignment changes.



## **Product Features**

- · LTE CAT-M1/NB-IoT ready
- GPS/GNSS positioning technology
- · E-paper display for status & alerts
- 5+ year battery life\*
- · IP67 rated
- · Alarm capable
- · Weather-resistant adhesive
- No maintenance required
- $\cdot \ \mathsf{Cloud} \ \mathsf{data} \ \mathsf{management} \ \mathsf{capabilities}$





Each antenna can be individually identified on a tower or throughout the entire network. With our robust remote monitoring software, operators can set thresholds for changes in azimuth, tilt, and roll. When these thresholds are exceeded, an alarm will be generated and the operator will be notified immediately. In case of emergencies, priority lists can be easily created using available alignment data, allowing for faster disaster recovery.

### Remote Antenna View



# **Technical Specifications**

Power	Accuracy	Compliance
<ul><li>Battery: 3.7V DC</li><li>Battery life: 5+ years*</li><li>E-paper display</li></ul>	<ul> <li>Azimuth: 1° RMS</li> <li>Mechanical tilt: 1° RMS</li> <li>Roll: 1° RMS</li> </ul>	<ul><li>LTE CAT-M1/NB-IoT</li><li>FCC Part 15 compliant</li><li>IC &amp; CE compliant</li></ul>
Remote Monitoring	Dimensions & Weight	Adhesion to Antenna
<ul><li>User-defined alarm thresholds</li><li>3D antenna view</li></ul>	<ul> <li>Length: 132 mm</li> <li>Width: 48.5 mm</li> <li>Height: 26 mm**</li> <li>Weight: 3.8 oz</li> </ul> **Note: 26 mm at the thinnest part. 14.5 mm on the thicker end.	<ul> <li>High strength bonding tape</li> <li>Instant bond</li> <li>Extreme temperature and UV resistant</li> <li>Expansion and contraction</li> <li>20+ year bonding</li> </ul>



#### Easy to Set Up

Installing IoA is a quick process designed with the technician in mind. Use the software to set alignment thresholds. Then, simply insert an IoT-enabled SIM card and attach IoA to the back of the antenna to start reporting antenna alignment data to the cloud.

### **Quality Standards**

Every IoA device is designed to surpass performance standards required for wireless monitoring products. It has a battery lifetime of 5+ years\* and strictly enforced waterproof sealing standards IP67.

### **Technical Support**

Professional training and technical support are available to guarantee the best user experience. Please, contact your sales representative for more information.



<sup>\*</sup>Depending on reporting frequency