



Sunsight



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AntennAlign Alignment Tool (AAT)

Field-proven, High-quality Antenna Alignment Solution

Overview

Utilizing leading-edge technology, Sunsight's AntennAlign Alignment Tool (AAT) delivers unprecedented performance. The new AAT models (AAT-30, AAT-15, and AAT-08) ensure the precise antenna position in the field for the intended RF network design, bringing accuracy during deployments, installations, and ongoing operations. Initial antenna position installation is critical during cell site antenna upgrades or new cell deployments for post installation network performance. Incorporating a number of exclusive features, the AAT is the most accurate and rugged tool on the market. The AAT saves time and money by eliminating costly site re-visits and re-climbs. Key parameters such as latitude, longitude, azimuth, tilt, roll, height, installer, and current date/time are saved for generation of comprehensive reports by the AAT for documentation purposes.

After mounting, the installer adjusts the antenna according to pre-determined specifications until all positions align, then tightens the mounting brackets and presses the "capture" button to store the final alignment specifications.

Highest Accuracy

Performance Highlights - The AAT integrates dual accelerometers (they are digital inclinometer, global positioning satellites (GPS and GLONASS), and laser range finding to take precise antenna alignment measurements. The AAT employs a dual approach using both GPS and GLONASS constellations for faster azimuth determination, even in environments where the sky is partially obscured. The AAT-30 allows for real-time accurate azimuth measurements up to $\pm 0.3^\circ$ RMS and $\pm 0.75^\circ$ R99*, and downtilt and roll captures to an accuracy of $\pm 0.1^\circ$. This allows for correctly installing antennas the first time, eliminating site re-climbs and re-visits. Additionally, network performance issues due to antenna misalignment are reduced. The AAT ensures designed coverage and improved carrier to interference-plus-noise ratios (CINR) for faster 4G LTE data throughput and better coverage for all networks, including 2G/3G. The AAT also captures extremely accurate positioning data (Lat/Long to ± 30 cm) This horizontal accuracy is a critical component for meeting the E911 Phase 2 location requirements.

Rugged, Durable Design

AATs are proven to be more reliable in the field than comparable instruments. The AAT-30 is **smaller and lighter** than its predecessor by more than half. Utilizing a durable powder-coated aluminum housing, the AAT is shock resistant, sealed from dust contaminants and resistant to harsh weather conditions. The FCC- and CE-certified AAT also features a Sunsight exclusive noise-shielding design that allows it to work in "hot" RF environments where other tools fail.

Versatile

Simple to operate, the AAT it can be mounted to the top, side, and front or back of antennas, all depending on the user's needs. Antenna alignment profiles and reports can quickly and easily be generated via a web-based software GUI accessed through WiFi using any standard PC or mobile device. No proprietary software is required.

Tool of Choice

More carriers, turf vendors, and equipment vendors recommend and/or mandate the AAT than any other antenna alignment tool. Visit www.sunsight.com/getdemo on now to request an appointment with one of our sales engineers.

Technical Specifications

Accuracy:	Value
Azimuth R99*	.75°
Azimuth RMS*	.3°
Tilt/Roll	.1°
Position*	30 cm w/SBAS
Altitude With LRF	30 cm (AGL)
GPS Receiver	540 channel
Satellite Constellations	GPS and GLONASS
Battery:	
Type	LiFePO4
Life	7-8 hrs
Charge Time	< 3 hrs
Charger	100-240VAC
Weight:	
Unit	3.7 lbs; 1.6 kg
Mount	1.2 lbs; .54 kg
Unit Dimensions	17"x3.8"x1.7" 43.2cmx9.6cmx4.3cm
Environment:	
Op Temp	-40°C to 70°C
Storage Temp	-40°C to 85°C
Humidity	95%
Communications	802.11b,g,n
Output	PDF, CSV, proprietary encrypted format
Memory	8 GB
Industry certifications	CE and FCC



Accessories

Part #	Description
P/N SS-T-LsrR-Kit 1	LASER Rangefinder ('Laser Tape Drop') – enables AAT to capture Above Ground Level (AGL) height to +/- 1 ft. (0.3 meters) Measurements can be used in lieu of a traditional tape drop.
P/N SS-T-AzmScope-Kit-1	Azimuth Scope Kit – allows AAT user to measure antenna azimuth from the ground within +/-2.5°. Especially useful for quick audits for towers with T-booms, Powerpoles, or Osprey nests where climbing and installing AAT on panel antenna is not permitted.
Mounting System	Mounts available for any antenna installation such as, top, side, round, microwave etc.

Custom mounting brackets available with request.