VIAVI Solutions

Antenna Alignment GLO GPS

Roll: 0.0°
Target: 0.0°

Tilt: 3.0°
Target: 0.0°

Back

Save

Reports

Site ID: NY00123
Sector: 0145
Antenna: 5G0118

Azimuth: 3°
Target: 0°

Date: 01-15-19
Time: 17:56:38
Latitude: 14.5° N
Longitude: 90.50° W
Height: 347.7 m

Camera

Brochure

VIAVI
3Z RF Vision
Antenna Alignment Tool

3Z RF Vision

3Z RF Vision is an innovative antenna alignment tool that helps users accurately align panel and microwave point-to-point antennas. Once alignment is achieved, the tool provides unique reporting capabilities that allow users to retrieve and share automated line-of-sight reports, even before leaving the job site.

Why is Antenna Alignment Important?

During the installation of a wireless network, antenna alignment counts. Companies spend millions of dollars to plan and design wireless and microwave networks. As you plan coverage objectives, it is critically important that antenna alignment is accurately implemented during the installation. Otherwise, it will result in coverage gaps, network performance degradation and loss of revenue.

It is equally important that installers are equipped with an effective and reliable antenna alignment tool, like 3Z RF Vision. This will give you the confidence that the job was performed as indicated on RF design specifications.

Benefits

- Accurately align directional antennas (panel, microwave, and 5G cylindrical antennas)
- Generate reliable and automated line-of-sight surveys
- Match antenna alignment with RF design
- Maximize voice quality and data traffic
- Improve data user throughput & KPIs
- Reduce churn
- Reduce OPEX

Key Features

- Built-in camera
- Bullseye target alignment with augmented reality
- Dual-frequency technology
- Impact-resistant 5" touch screen display
- Weather-resistant, rugged design
- Mobile application to share line-of-sight surveys
- Fully integrated with VIAVI StrataSync™ cloud-based asset, data and workflow management.

Built-In Camera

Line-of-Sight Survey with Every Alignment

3Z RF Vision not only aligns the antenna, but also provides a visual guide to show where the antenna is pointing. The line-of-sight image gives you greater clarity and simplifies the alignment process. The world around your antennas is constantly changing, and 3Z RF Vision allows you to capture these changes. New building constructions, growing tree lines, etc. will degrade your coverage objectives and create unhappy customers. Only 3Z RF Vision will allow you to see these obstructions and give engineers the ability to optimize antenna orientations.

5G Ready

5G will largely be deployed in a small cell format using high-band millimeter-wave (mmW) frequencies. High-gain millimeter-wave antennas will produce pencil-like beams that require LOS (Line-of-Sight) or NLOS (Near-Line-of-Sight) to achieve high data rates.

To maximize the use of high-band mmW frequencies and massive MIMO beamforming antenna performance, precise antenna alignment and an LOS survey are critical during installation. 3Z RF Vision antenna alignment tool is ready to help you service 5G networks.

Dual-Frequency GNSS Technology

3Z RF Vision Connects to GPS and GLONASS

Dual-frequency GNSS technology allows 3Z RF Vision to measure satellites twice, seeing a total of 174 satellite signals (3x more than competitor products). This delivers more accurate and faster readings, even in high-density urban cities and crowded towers.

Easy to Use

Camera and Touch Screen View Finder

RF Vision's augmented reality displays a bullseye target in the 5-inch LCD touch screen display. Now, the tower tech can perfectly align the antenna by simply moving the crosshair over to align the bullseye in one easy step.

The touch screen display is responsive to touch in most work gloves, letting you keep your hands warm and protected in cold conditions.
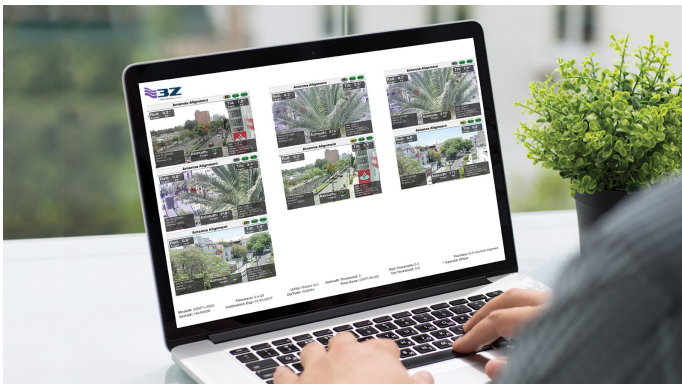
Streamlined Report Generation and Workflow

No post-processing required! 3Z RF Vision will create a comprehensive report (PDF or CSV) for each site aligned. Easily retrieve reports via the built-in micro-USB port, send it with our mobile app or from the StrataSync cloud database. Your report includes the target coordinates and the final measured alignment data, site sector identifiers, geocoding, geolocation, date and time stamp, and line-of-sight photo validation.

Now fully integrated into VIAVI StrataSync, a cloud-based asset, data, and workflow management system, the 3Z RF Vision further improves operational efficiency by simplifying the work assignment-to-payment cycle. End-to-end workflow allows managers to define and assign new jobs while in the office, then push them from the cloud to technicians' RF Visions via the VIAVI Mobile Tech App, and monitor all VIAVI instrument results from a single interface:

- No more paper hand-offs or manual configuration errors
- Automatically save results to the cloud with VIAVI Mobile Tech Background Save functionality
- Augment your test data with on-site smartphone photos and technician notes
- Quickly find all jobs not aligned to specification with StrataSync Pass/Fail analysis
- Easily view and manage your RF Vision instruments in StrataSync along with your other VIAVI instruments

Fits most antenna types

Small Cell

Panel

Microwave

Rugged. Lightweight. Portable.

Designed with the User in Mind

- Protected with rubber guards and rugged design
- Small design for increased portability
- Sunlight-readable screen
- Weather and impact resistant

What Comes with Your Kit?

Everything You Need to Get Started

- 3Z RF Vision antenna alignment tool
- Universal Strap Clamp
- Rugged hard-case with padded interior
- Water-resistant soft carrying bag
- Rubber bumpers for microwave antennas
- AC/DC power charger and universal power adaptors

Ordering Information

Description	Part Number
3Z RF Vision Kit	3Z-RFV-2000
Camera License (purchased with kit)	3Z-RFV-CAMD
Camera License (purchased separately)	3Z-RFV-CAML
Chinese UI for 3Z RF Vision (purchased with kit)	3Z-RFV-CHUI

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