



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
- Mobile application to share line-of-sight surveys
- Weather-resistant, rugged design

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.



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.

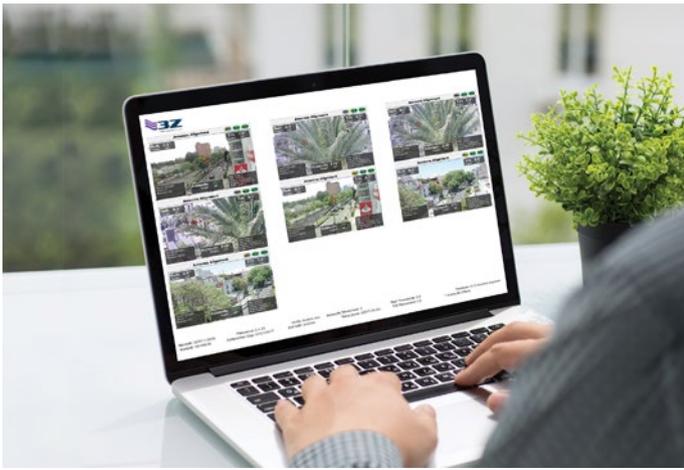
The touch screen display is responsive to touch in most work gloves, letting you keep your hands warm and protected in cold conditions.



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.



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 seperately)	3Z-RFV-CAML

Secure Report Generator

No post-processing required! 3Z RF Vision will create a single comprehensive PDF or CSV report for each site being aligned. Retrieve reports easily via the built-in micro USB port or send it in real-time using our mobile app. 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.

Fits most antenna types



Small Cell



Panel



Microwave

