

Brochure

VIAMI AMP

Antenna Motion Processor

Built-In Antenna Alignment Monitoring

AMP

The AMP is a small, all-in-one motion processing module for use in active antennas. The module seamlessly integrates into your antenna's existing circuitry to enable reporting on azimuth, tilt, and roll from a relative reference point.

Antennas with the AMP built-in can monitor their own mechanical alignment in real-time. Thus, tower crews are only required to align antennas that have already been diagnosed as misaligned, saving your customers time and money. The AMP's small form factor and multiple interfaces allow for quick implementation into existing antenna circuits, requiring minimal redesign of your antenna's current internal components.



Benefits

- Enables remote alignment monitoring in real time
- Enables self-healing networks
- Reduce/Eliminate alignment inspection visits
- Reduce OPEX costs for mobile operators

Features

- 3D motion monitoring: azimuth, tilt, roll
- User-defined motion alarms
- Intelligent algorithms
- UART Interface
- Lower power consumption (30mA)

Applications

- Antenna motion detection (base stations, microwave dish, small cell, etc.)
- Heading reference systems (HRs)
- Robotics
- Condition monitoring
- Tilt sensing
- General stabilization systems
- Consumer electronics



Custom Motion Alarms

RF engineers can set their desired threshold of movement based on their design tolerance and request alarm reports with frequencies of either every second, minute, hour, or day. The alarm system will warn operators of perceived changes in azimuth, tilt, and roll experienced by their antennas.

Smart Algorithms

Not only can the AMP monitor motion – it knows when to count variations in motion as real or invalid. Using a sophisticated, proprietary algorithm, the AMP understands its environment to report changes in azimuth, tilt, and roll without reporting false positives caused by vibrations, temporary shakes, or other artificial movements.

AMP Evaluation Kit

The AMP Evaluation Kit is a single-board development kit for evaluation and development of the AMP. It features USART, and USB interfaces. The kit is supported by a visualization software that is free to download. The software enables you to test the link and extract real-time alignment information. Use AMP's Evaluation Kit to explore all possible applications and test its compatibility with your systems.



Ordering Information

Description	Part Number
Antenna Motion Processor + Humidity	3Z-AMP-1801
Antenna Motion Processor	3Z-AMP-1800
Antenna Motion Processor Evaluation Kit	3Z-AMP-EVLK