

# AMP

## Antenna Motion Processor



### The First Built-In Antenna Motion Processor

#### AMP 1801

The AMP 1801 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.

An antenna with 3Z's AMP built in can monitor its own motion variations in real time and send a remote alert if motion is detected. 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 little to no redesign of your antenna's current internal components.



#### AMP Evaluation Kit

The AMP Evaluation Kit is available for the AMP 1801 module. Companion software is also available to fully evaluate the module, which provides a remote antenna view and real-time demo.

The AMP Evaluation Kit lets developers explore the possible applications of the AMP as well as test its reliability within their application. It features SPI, I2C, USART, and communication with AISG control boards via RS-485.



# AMP

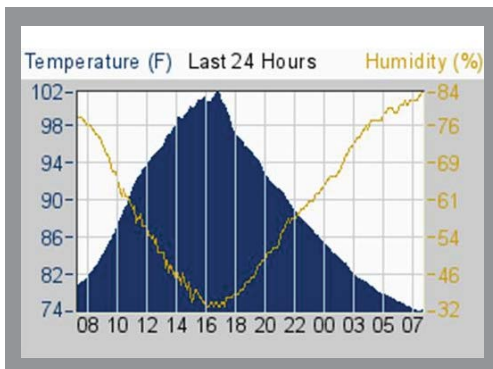
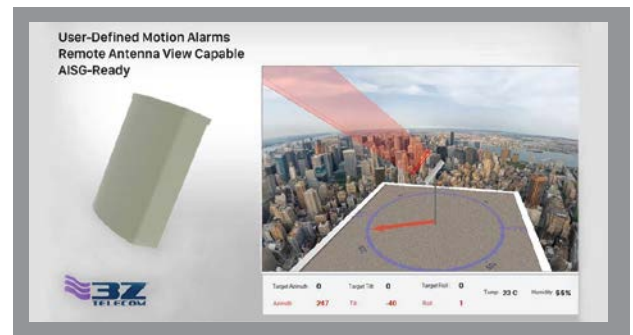
Antenna Motion Processor



Monitor Antenna Alignment in Real-Time  
3D Motion Monitoring: Azimuth, Tilt, Roll  
User-Defined Motion Alarms  
Intelligent Learning Algorithms  
AISG-Ready  
SON Automation  
Quick Time-to-Market

## Set 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.



## Environmental Monitoring

The AMP module comes in two configurations; both monitor Azimuth, Tilt, and Roll, while the AMP 1801 can also track changes in atmospheric factors including temperature and humidity. This provides a window to your antenna's internal conditions for your peace of mind.

## Smart Learning 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 learns and understands its environment to report changes in Azimuth, Tilt, and Roll without reporting false positives caused by vibrations, temporary shakes, or other non-essential movements.

