

- *Portable*
- *25-MHz bandwidth*
- *Flexible*
- *Modular*
- *Remote Operation*



Features

- Eight-element adaptive array with dual channel receiver design
- Instantaneous 25-MHz bandwidth per receiver
- Generates one wideband beam with adaptive beam processing
- Modular processing system
- Portable design
- Remote operation capability

Description

This ABFS-24-8-01 adaptive array is a multiple-element adaptive beam-forming system that is designed to operate in the 2400-MHz frequency band. It is intended to be used as a smart antenna to extract and clean up signals in congested signal environments. The design is flexible, modular, and can be customized to meet user requirements.

The system employs a single wideband receiver to allow operation on one selected 25-MHz subband. The subband is internally digitized and processed by advanced FPGA-based processing technology to isolate and enhance the signal of interest.

The system is software controlled and is operated through a flexible graphical interface. Optionally, a socket-based interface is available for remote operation and control.



Specifications

Includes

Eight element adaptive array head
Pan and tilt unit for head positioning
Tripod
Adaptive beam-forming electronics
Rack mount server
GPS Unit
Transit Case

Additional Options

Four Terabyte TVO recorder (11 hour recorder)
Rack mount keyboard and monitor
Additional server to run X-Midas applications
Electronic compass and camera

Engineering

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|------------------------------|------|
| Interferer handling capacity | 7 |
| Gain (dBi) | 9 |
| Close Angle Suppression | 1.5° |
| Suppression (dB) | >30 |

Receiver

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|-------------------------|---------------|
| Band (MHz) | 2387–2487 MHz |
| Instantaneous bandwidth | 25 MHz |
| Tuner step size | 50 KHz |

Beam forming

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|---------------------------------|------------|
| Channels processed | 1 wideband |
| Channel size | 25 MHz |
| Independent Adaptive processing | |

Array Head Physical Properties

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|--------|--------------|
| Blades | 8 |
| Length | 24.3 inches |
| Depth | 19.45 inches |
| Height | 10.2 inches |
| Weight | 50 pounds |