

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



## Features

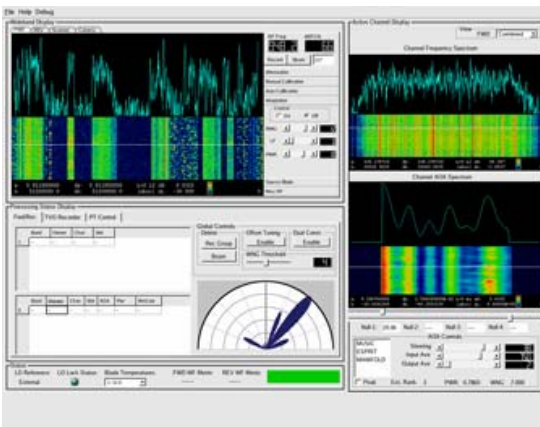
- Eight-element adaptive array with dual channel receiver design
- Instantaneous 75-MHz bandwidth per receiver
- Generates 254 simultaneous beams with fully-independent adaptive beam processing
- 200-kHz channel spacing
- Modular processing system
- Portable design
- Remote operation capability

## Description

This ABFS-18-8-01 adaptive array is a multiple-element adaptive beam-forming system that is designed to operate in the 1800-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 dual-band receivers to allow simultaneous operation on two selected 75-MHz subbands. These subbands are internally digitized and processed by advanced FPGA-based processing technology to isolate and enhance up to 254 signals 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

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

### Receiver

Band A (MHz)	1803–1987 MHz
Band B (MHz)	1710–1910 MHz
Instantaneous bandwidth	75 MHz
Tuner step size	50 KHz

### Beam forming

Channels processed	254 (127 per band)
Channel size	200 KHz
Independent Adaptive processing	

### Array Head Physical Properties

Blades	8
Length	26.8 inches
Depth	23 inches
Height	11.35 inches
Weight	50 pounds