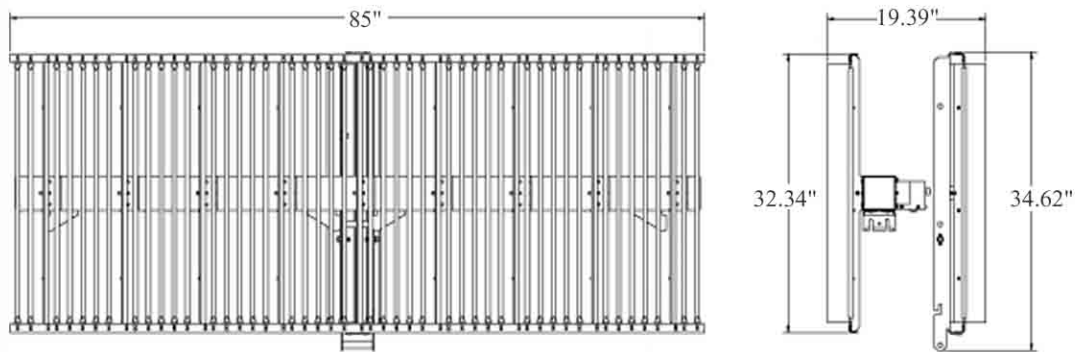


Antenna Associates Inc.

MICROWAVE ANTENNA SOLUTIONS

FAI-52S ANTENNA



Antenna Associates Model FAI-52's function is to provide identification and position detection data for civil Air Traffic Control or Military IFF Applications. It is an 8 Foot open planer array antenna that can be utilized in a stand-alone configuration or in combination with a primary surveillance radar.

At the heart of the FAI-52 is its nine radiating columns. Each column is comprised of high strength composites vacuum sealed to a printed circuit board. This process hermetically seals the column from the elements while adding significant rigidity, durability, and weather resistance.

The FAI-52 is available in two versions. The Standard version (FAI-52S) incorporates conventional Sum and Difference channels. The Monopulse version (FAI-52M) utilizes three channels, Sum, Monopulse Difference and Control (SLS) for increased accuracy. An important benefit of the FAI-52 Antenna is that it can be converted easily between the Monopulse and Standard versions.

FEATURES

- Optimized Elevation Pattern
- Simply Converted (Standard/Monopulse)
- Lightweight Rugged Design
- Resistant to Extreme Weather

FAI-52S ANTENNA CHARACTERISTICS

ELECTRICAL

Frequency band	1030±5 MHz & 1090±10 MHz
Polarization	Vertical
Gain Sum	19.0 dBi Min.
Sum Azimuth SLL	-25.0 dB Min.
Sum Azimuth BLL	-25.0 dB Min.
Difference Null	-25.0 dB Min.
Difference Coverage	4.0 dB above Sum
Sum Azimuth B.W.	9.0 Deg. Nominal
Sum Elevation B.W.	25.0 Deg. Nominal
Monopulse Difference SLL	N/A
Monopulse Sum Diff Crossover	N/A
SLS Coverage of Sum SLL	N/A
VSWR Sum	
1030 MHz	1.50: 1.0
1090 MHz	1.50: 1.0
VSWR Difference	
1030 MHz	1.50: 1.0
1090 MHz Max.	1.50: 1.0
Power Rating	10 kW Peak
.....	100 W Avg
Effective Beam Width	
@-9.0 dB	5.0 deg. Nominal

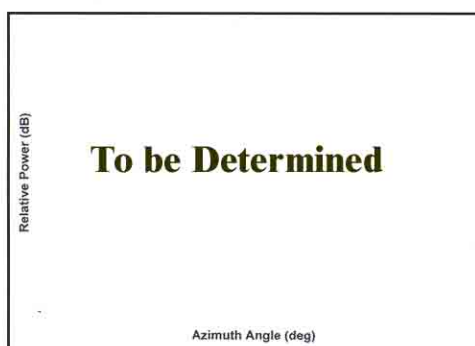
PHYSICAL

Weight	100 lbs. approx.
Length	85 in.
Height.....	34.62 in.
Depth.....	19.39 in.

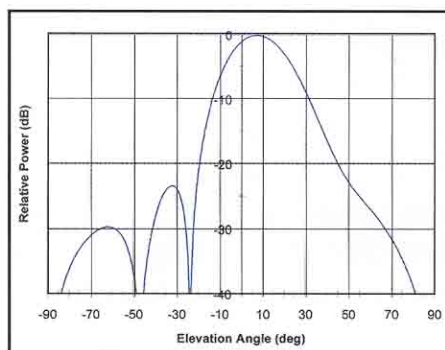
ENVIRONMENTAL

Temperature, Hi/Low	+70°C to -50°C
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ANTENNA PATTERNS:



FAI-52S (Sum/Diff) Azimuth Pattern



FAI-52S Elevation Pattern

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