







Lightest most compact 1.2m flyaway antenna

General

Elliptical with centre hub Antenna type plus eight petals

1.2m Diameter Configuration Offset feed

Linear, orthogonal transmit and **Polarisation**

receive.

Cross Polarisation -35dB within the -1dB co-polar

contour

FA-120/80

FA-120/140

FA-120/180

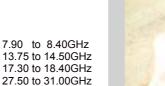
FA-120/300

40dB Port to Port Isolation

At the time of writing the FA-120 antenna is believed to be the lightest most compact 1.2m flyaway antenna available. It is intended primarily for Satellite Newsgathering, but is equally well suited to any other application where a one man lift is mission critical or transportation as checked baggage is vital.

The FA-120 is almost entirely manufactured from moulded carbon fibre and durable light weight plastics to ensure that even with 3 axis motorisation, packed weight comes in at less than 32Kgs and the highly innovative "Russian Doll" reflector design has kept the packed dimensions to easily manageable proportions comparable with many much smaller antennas.

Specifications



3dB Beamwidth <1.8° at 13.75GHz

Transmit Power 1kW max. Off Axis Transmit Gain <29-25 logθ dBi

VSWR 1.3:1

Transmit Gain FA-120/80 39.0dBi mid band 43 0dBi mid band FA-120/140 FA-120/180 45.0dBi mid band FA-120/300 49.5dBi mid band

Receive

Transmit

Transmit Bands

Receive Bands FA-120/80 7.25 to 7.75GHz FA-120/140 10.70 to 12.75GHz FA-120/300 19.20 to 21.20GHz FA-120/80 38 0dBi mid band **Receive Gain** FA-120/140 41.0dBi mid band FA-120/300 46.5dBi mid band

Environmental

Operating Temperature -40 to +80°C Humidity 100% **Altitude** 4.500m Wind Rating 100km/h survival

Physical

Elevation Adjustment 0 to 90° **Azimuth Adjustment** +/-180° **Polarisation Adjustment** +/-95°

Packed Size 0.60 x 0.60 x 0.38m

Weight 31kgs









At GigaSat we understand the difficulties faced by operators in the field and this is reflected in the attention to detail found in the FA-120 antenna.

Composite legs, integral to the overall dimensions of the antenna when packed, fold down and ratchet into multiple positions for high stability on any terrain with an incline up to 15 degrees and stake holes allow the antenna to be pinned down for high wind operation. The mount case, empty when the antenna is deployed can also be loaded with ballast.

As a manual antenna the FA-120 can easily be pointed using the three axis vernier adjusters. A spirit bubble is provided to level the antenna and clear scales are provided for azimuth, elevation and pole.

When specified, motors, inclinometer, potentiometers and digital control unit all fit neatly within the weatherproof housing and allow comprehensive control via RS485, using either the GigaSat STC-100 antenna controller or a range of third party controllers.

A convenient +12VDC primary power allows the antenna to be powered from the standard accessory socket on a car or an external weatherproof power supply can be provided if required.

Within minutes of arrival at site the FA-120 can automatically point, peak and track, even on highly inclined satellites. However, in the unlikely event that the motorisation or power should not be available the antenna can easily be manually overridden at any time using the 13mm/1/2" hand crank supplied.



Note:

Specifications are subject to change without notice Please check with the factory 11/2006

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