

# C140FA Motorized Flyaway Antenna

## Satcom & Antenna Technologies Division



### Overview

The CPI Satcom & Antenna Technologies Inc. (CPI SAT) innovative flyaway line leads the way in the next generation of flyaway terminals. Available in 60cm to 1.4m reflector sizes, this tripod antenna line features simple manual or automated satellite acquisition; an intuitive GUI; and a range of optional extra features.

The flyaway line is lightweight allowing for ease of transportation. The completely waterproof and rugged design allows for operation in even the most challenging of conditions, be that in a war zone for military communications; capturing breaking news stories from the front line; or distributing CCTV from remote locations on international borders.

### FEATURES:

- Simple manual or automated satellite acquisition
- Waterproof and rugged design for harsh environments
- Intuitive GUI and setup time of less than 5 minutes
- High performance carbon fiber segmented antenna
- Assisted, fast acquisition via intuitive GUI (C140FA)
- Ka, Ku & X-Band
- ITAR free
- Common mount for C125 and C140
- Includes a clip-on auto pointing pack

### OPTIONS:

- Range of integrated BUC/SSPB and LNB
- Auto-pointing kit can be easily retro fitted or swapped between antennas and sizes

### BENEFITS:

- Lightweight
- Ease of operation

### APPLICATIONS:

- Designed for operation in the most challenging of conditions

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## Specifications

MECHANICAL <sup>(1)</sup>	
Antenna Diameter	Available in 60cm to 1.4m reflector sizes
Antenna Type	Flyaway
Reflector Construction	Carbon fiber, 8 piece segmented
Packaging	Case 1: 33"x24"x18" – 85lbs. Case 2: 34"x28"x16" – 94lbs. Case 3: 34"x28"x16" – 88lbs.
User Interfaces	AC power input – 85 to 264 VAC, 47-63 Hz DC power input – 11 to 36 VDC Ethernet (weatherproof RJ45) RF monitor (N-type) USB (weatherproof type A)
Control	Single button control Web browser monitor & control Simple highly intuitive interactive web user interface

ELECTRICAL <sup>(1)</sup>	Ka-Band Circular Polarized		Ku-Band Linear Polarized		X-Band Circular Polarized	
	Receive	Transmit	Receive	Transmit	Receive	Transmit
Frequency (Ghz)	19.2 to 21.2	29.0 to 31.0	10.70 to 12.75	13.75 to 14.50	7.25 to 7.75	7.90 to 8.40
Antenna Gain, Mid Band (dBi)	38.0	42.10	43.00	43.80	52.30	55.75
Gain	48.5 dBi	51.1 dBi	42.8 dBi	44.5 dBi	38.1 dBi	38.8 dBi
G/T	G/T@20o = 25.1 dBk		G/T@20o = 21.8 dBk		G/T@20o = 17.45 dBk	

<sup>(1)</sup> Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.



### Alignment - C140FA

The optional auto pointing kit supplied with the C140FA simply clips onto the antenna and provides an upgrade to fully automatic pointing capabilities. The powerful on board controller allows for highly intuitive, single button control or a graphical user interface experience via a Web UI to deskill the operation of locating and acquiring the desired satellite.

The system utilizes the built in GPS, compass and inclinometer sensors in combination with information obtained from the optional beacon receiver and DVB receiver or attached MODEM, to provide data to the controller to enable automatic satellite pointing and peaking

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## Specifications

ENVIRONMENTAL <sup>(1)</sup>		
Temperature (Tested to MIL-STD-810G CHG-1 501.6 & 502.6 Proc I & II)	Operational Survival	-20°C to 49°C (-5°F to 120°F) -45°C to 70°C (-50°F to 160°F)
Humidity (Tested to MIL-STD-810G CHG-1 507.6 Proc II)	Operational	95% Relative Humidity
Altitude (Tested to MIL-STD-810G CHG-1 500.6 Proc I & II)	Operational Survival	-3,000m @ -10°C (9,842ft @ 14°F) 5,000m @ -30°C (1,6404ft @ -22°F)
Vibration (storage/transit) (Tested to MIL-STD-810G CHG-1 514.7 Proc I)		Cat. 24 MIT: 0.04 g2/Hz, 20 Hz to 2,000 Hz, 1hr/axis, rms=7.7g's
Sand & Dust Ingress (storage/transit) (Tested to MIL-STD-810G CHG-1 510.6 Proc I)	Dust Sand	10.6g/m3, 9m/s @ 49°C 1.1g/m3, 18m/s @ 49°C (pending)
Solar Radiations (Tested to MIL-STD-810G CHG-1 505.6 Proc I)	Operational	1120W/m2 @ 49°C (355BTU/ft2/hr @ 120°F)
Ice/Freezing Rain (Tested to MIL-STD-810G CHG-1 521.4 Proc I)		25.4mm (1in) Ice buildup, de-ice before use
Corrosion / Salt Fog (Tested to MIL-STD-810G CHG-1 509.6)		_____
Wind Loading <sup>(2)</sup> (Pending for Ka-Band)	Operational	30 mph with gust to 45 mph (with ballast)
Blowing Rain (Tested to MIL-STD-810 CHG-1 506.6 Proc I)		4 in /hour, 40mph (18m/s) wind speed

(1) Some specifications may vary based on the combination of equipment, options and/or upgrades ordered.

(2) Depending on vehicle capabilities.

Contact us at [CustomerCareSAT@cpii.com](mailto:CustomerCareSAT@cpii.com) or call us at +1 770-689-2040

The data should be used for basic information only.

Formal, controlled specifications may be obtained from CPI for use in equipment design.



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