

C140FM Manual 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

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 ⁽¹⁾	
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" – 70lbs.

ELECTRICAL ⁽¹⁾	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	

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

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Specifications

ENVIRONMENTAL ⁽¹⁾		
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 ⁽²⁾ (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 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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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design. © 2022 Communications & Power Industries LLC. Company proprietary; use and reproduction is strictly prohibited without written authorization from CPI.

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