

2.4m Flyaway Carbon Fiber Antenna Datasheet (Auto)



2.4m Manual Flyaway Antenna Photo

1. System Composition

- 1.1 Feed subsystem: Double-offset reflector Gregorian antenna.
- 1.2 Antenna structure subsystem: Azimuth/Elevation turntable, Feed, support leg and etc.
- 1.3 Antenna control subsystem: Azimuth/Elevation/Polarization motor, Azimuth/Elevation/Polarization angle sensor, ACU case, controller, etc.

2. System Features

- 1. The main support system of the antenna is carbon fiber material. The system realizes 60% carbon fiber, the material is more stable, the weight is lighter, the strength is higher, and it is more convenient for portable use.
- 2. The antenna has the features of low sidelobe and high gain, which can meet the technical requirements of satellite companies.

China Starwin Science&Technology Co., Ltd.

Tel: +8629-88664381, E-mail: sales@starwincom.com, <http://www.starwincom.com>

Copyright© Starwin

3. The antenna system is equipped with GPS positioning system, position detection system, polarization adjustment system, servo drive system, automatic protection system, high performance satellite beacon receiving system, Wi-Fi wireless control, intelligent control management software and so on.

5. Under special circumstances, when GPS can not be used, the satellite longitude and latitude can be input manually, and the pointing can be completed quickly.

6. It provides three automatic and manual control modes to facilitate emergency operation in various environments.

3. Technical Specifications

Product Name		2.4m Auto Flyaway Antenna	Feed Type		Double Offset
Equivalent Caliber		2.4m	Polarization		Linear / Circular Polarization
C Band Frequency Range		Rx: 3.4 ~ 4.2 GHz	C Gain (LP)		Rx: ≥ 38.2+20lg(f/3.91) dBi
					Tx: ≥ 42+20 lg(f/6.14) dBi
		Tx: 5.85 ~ 6.725 GHz	C Gain (CP)		Rx: ≥ 38.1 +20lg(f/3.91) dBi
					Tx: ≥ 42.1+20 lg(f/6.14) dBi
Ku Band Frequency Range		Rx: 10.95 ~ 12.75 GHz	Ku Gain		Rx: ≥ 47.2 +20lg(f/12.50) dBi
		Tx: 13.75 ~ 14.5 GHz			Tx: ≥ 48.7+20 lg(f/14.25) dBi
XPD (On Axis)		≥ 35 dB Ku Band	SWR		C Band: Tx: ≤ 1.3; Rx: ≤ 1.3
		≥ 35 dB C Band LP			
Port Isolation		≥ 19.7 (Rx), 27.3 (Tx) dB C Band CP			Ku Band: Tx: ≤ 1.25; Rx: ≤ 1.25
First Side Lobe		≤ -14 dB	Power Capacity		300 W
Interface		Ku Band: RF Interface: WR75; IF Interface: N-50Ω			
		C Band: RF Interface: CPR-137, CPR-229; IF Interface: N-50Ω			
Range	Az	±220°	Speed	Az	0.1~3°/s

China Starwin Science&Technology Co., Ltd.

Tel: +8629-88664381, E-mail: sales@starwincom.com, <http://www.starwincom.com>

Copyright© Starwin

	EI	0°~90°			EI	0.1~1°/s
	POL	± 95°			POL	Manual
Operation Temperature	-40℃ ~ +60 ℃			Operation Wind Speed	≤11 m/s (Counterweight)	
Storage Temperature	-50℃ ~ +70 ℃			Survival Wind Speed	≤18 m/s (Counterweight)	
Humidity Requirement	≤95% (20 ℃)			Protection Grade	IP65	
Power Supply	220 VAC ±10%, 50Hz±2 Hz			System Power Consumption	800W	
BUC Option	ABL129 Series			LNB Option	HS1507HBN(Ku); 3120N (c)	
System Weight	≤ 230 Kg (Exclude the BUC, LNB, ACU chassis, Package and the accessories)					

4. Package

Item	Name	Max size of package (L×W×H mm)	N.W (Kg)	G.W (Kg)
1	Antenna panel A aluminum alloy box	1070×530×970	25.8	43.6
2	Antenna panel B aluminum alloy box	970×640×1110	17.1	42.1
3	Support leg A aluminum alloy box	1490×490×385	17.7	33.4
4	Support leg B aluminum alloy box	1775×380×385	31.9	46.8
5	Support arm aluminum alloy box	1180×720×570	46.8	65
6	Back Structure aluminum alloy box	1625×920×320	31.6	51.3
7	Turntable aluminum alloy box	750×620×780	55.4	69.2
	Total	3.1 cbm	226.3	351.4

Note: actual value is subject to shipment.

5. Packing List

Item	Name	Description	Quantity	Unit	Remark
1	Turntable aluminum alloy box	Turntable	1	set	
2	Back Structure aluminum alloy box	Back Structure	1	set	
		Drawbar C	2	pc	
		Drawbar D	1	pc	
3	Support arm aluminum alloy box	Support Arm	1	set	Include the Ku band feed, Sub reflector, LNB
		Push Rod	1	set	
		Foundation Plate	3	set	
		Crank	1	set	
4	Support leg A	Support Leg	2	set	

China Starwin Science&Technology Co., Ltd.

Tel: +8629-88664381, E-mail: sales@starwincom.com, <http://www.starwincom.com>

Copyright©2020 Starwin

4/5

	aluminum alloy box	Support Arm	2	set	
		Anchor Bolt	10	pc	
5	Support leg B aluminum alloy box	Support Leg	1	set	
		Drawbar A	2	pc	
		Drawbar B	1	pc	
6	Antenna panel A aluminum alloy box	Panel	3	pcs	
		Support Chassis	1	set	
7	Antenna panel B aluminum alloy box	Panel	6	pcs	
8	1U Chassis Wooden Case	1U Chassis	1	set	Include 3 pcs of cable