

Elevate your connectivity with our advanced flyaway antennas, designed to excel in the most challenging and mission-critical X, App30B-15 Ku, Kx, and Ka-bands applications

Key Features

- Carbon fiber reflector and supporting system for lighter weight and higher reliability
- Complies with MIL-STD-188-164A, ITU-R S.580 and INTELSAT requirements
- Designed and tested to drain rainwater of 100mm/h, at elevation angles of up to 90°, for use near Equator line
- Easy to assemble and disassemble.
- Antenna and RF parts fit into two airline check-in cases or two carry-on backpacks
- Monitored and controlled via Wi-Fi
- One-button operation: automatically completes positioning, deployment, and satellite acquisition in under three minutes
- Tracking system both by beacon and DVB-S2/S2X carriers
- Automatic latitude and longitude acquisition with integrated GPS and failover to manually entered coordinates; manual pointing available
- Three control modes can be used for emergency and military operation environments: automatic, motorized, and manual
- Compatible with SpaceBridge ASAT™ and ESTELLA modems, and BUCs
- Integrated with SpaceBridge U7720-SA modem board
- Can be integrated to any ground network connectivity solution



RF CHARACTERISTICS

Model	SBFA120X	SBFA120UL	SBFA120UX	SBFA120A
Band	X	App30B-15 Ku	Kx	Ka
Tx Freq. (GHz)	7.9 – 8.4	12.75 – 13.25	13.75 – 14.5	27.5 – 31.0
Rx Freq. (GHz)	7.25 – 7.75	10.7 – 11.7	10.7 – 12.75	18.3 – 20.2
Polarization	Circular	Linear	Linear	Circular
Tx Gain mid-band	≥ 38.0 dBi	≥ 42.0 dBi	≥ 42.7 dBi	≥ 49.3 dBi
Rx Gain mid-band	≥ 37.3 dBi	≥ 40.7 dBi	≥ 41.3 dBi	≥ 45.8 dBi
XPD (dB)	≥ 30	≥ 35	≥ 35	≥ 25
VSWR	≤ 1.25:1	≤ 1.25:1	≤ 1.25:1	≤ 1.3:1
Isolation, Tx to Rx	≥ 110 dB	≥ 85 dB	≥ 85 dB	≥ 85 dB
Feed Interface	WR112	WR75	WR75	WR42 WR28
Sidelobe	MIL-STD-188-164A	ITU-R S.580	ITU-R S.580	ITU-R S.580

MECHANICAL

Reflector size	1.2m
Reflector type	Ring focus
Material of the reflector	Carbon fiber
Drive mode	Automatic, motorized or manual
Travel range	
Azimuth	±95°
Elevation	10 – 90°
Polarization	±90° (linear)
Speed Rate	
Azimuth	0.1 – 3°/sec
Elevation	0.1 – 3°/sec
Polarization	0.1 – 3°/sec (linear)
Antenna Net Weight	23kg (exclude BUC, packing, accessories)
Acquisition time	≤ 3min
Tracking Accuracy	Better than 1/5 of 3dB beamwidth
Tracking Mode	Beacon or DVB
Positioning Mode	GPS

POWER

Power Supply	90 -260VAC, 47 – 63Hz
Power Consumption	≤ 100W (BUC not included, during acquisition mode)

ENVIRONMENTAL

Operational Temperature	-40°C - +60°C
Storage Temperature	-50°C - +70°C
Operational Wind Speed	72km/h (with anchors and ballasts)
Survival Wind Speed	100km/h (with anchors and ballasts, pointed to zenith)
Operational Rain	100mm/h
Humidity	95% @20°C
Ingress protection	IP65
Vibration	MIL-STD-810F
Corrosion	MIL-STD-1250

Examples of antenna packing

Option	Packaging	Packing size (mm)	Net weight (kg)	Gross weight (kg)
2 Backpacks	Backpack 1	670x470x300	12	16.8
	Backpack 2	670x480x410	11	15.0
2 Hard Cases	Hard case 1	720x450x850	11	32.25
	Hard case 2	630x450x810	12	30.5



Backpack 1



Backpack 2



Hard Cases 1 and 2