

**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 rain water of 100mm/h, at elevation angles of up to 90°, for use near Equator line
- Easy to assemble and disassemble, in less than 10 minutes each, by one person
- Antenna and RF parts fit into two airline check-in cases or two carry-on backpacks
- BUC and LNB can be easily connected to the antenna, and space can be reserved in cases or backpacks to avoid repeated on-site connections
- Compatible with SpaceBridge ASAT™ and ESTELLA modems, SSPAs and BUCs
- Can be integrated to any ground network connectivity solution



**RF CHARACTERISTICS**

Model	SBFM120X	SBFM120UL	SBFM120UX	SBFM120A
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	≥ 38.2 dBi	≥ 41.4 dBi	≥ 42.1 dBi	≥ 49 dBi
Rx Gain mid-band	≥ 37.5 dBi	≥ 40.4 dBi	≥ 41 dBi	≥ 45.8 dBi
XPD (dB)	≥ 30	≥ 35	≥ 35	≥ 25
VSWR	≤ 1.3:1	≤ 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	Rx WR42 Tx 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
Travel range	Az. ±180° Elev. 10° – 90° (0° - 90° optional) Pol. ±90° (Ku-band only)
Antenna Net Weight	16kg (exclude BUC, LNB, packing, accessories)
Packing type	2 hard cases or 2 backpacks

**ENVIRONMENTAL**

Operational Temp.	-40°C - +60°C
Storage Temp.	-50°C - +70°C
Wind Speed	
Operational	72km/h*
Survival	145km/h**
Operational Rain	100mm/h
Humidity	100% @20°C
Ingress protection	IP67
Vibration	MIL-STD-810F
Corrosion	MIL-STD-1250

**Example of antenna packing**

Packaging	Packing size (mm)	Net weight	Gross weight
Backpack 1	710x410x250	7.4 kg	12 kg
Backpack 2	630x510x310	8.6 kg	12.4 kg



Backpack 1



Backpack 2