

**Elevate your connectivity with our advanced manpack 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 one backpack
- BUC and LNB can be easily connected to the antenna, to avoid repeated on-site connections
- Antenna can be converted to and from App30B-15, Kx and Ka-bands with simple replacement of feed with OMT and BUC/LNB.
- Compatible with SpaceBridge ASAT™ and ESTELLA modems, SSPAs and BUCs
- Integrated with SpaceBridge U7720-ODU modem
- Can be integrated to any ground network connectivity solution



**RF CHARACTERISTICS**

Model	SBMP090X	SBMP090UL	SBMP090UX	SBMP090A
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	≥ 35.5 dBi	≥ 39.3 dBi	≥ 40.0 dBi	≥ 47.6 dBi
Rx Gain mid-band	≥ 35.1 dBi	≥ 38.5 dBi	≥ 38.9 dBi	≥ 44.3 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	WR42 WR28
Sidelobe	MIL-STD-188-164A	ITU-R S.580	ITU-R S.580	ITU-R S.580

**MECHANICAL**

Reflector size	0.9m
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 Weight*	13.0kg (without packing) 17.0kg (with 1 backpack)
Packing type	2 backpacks or 1 backpack

**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

\* Excludes BUC, LNB, accessories

**Example of antenna packing**

