

**SUPSI Radio Club
SUPSI-SpaceLab Ground Station Equipment**

Antennas		
	UB-7030SAT	VB-216SAT
Boom Length	134 in. (340.4 cm)	168.75 in. (429 cm)
Maximum Boom O.D.	1.125 in (28.6 mm)	1.25 in. (32 mm)
Turning Radius (Max)	71.25 in (181 cm)	8.ft. (2.44 m)
Total Number of Elements	30	16
Longest Element	13 in. (33 cm)	39.5 in. (100 cm)
Wind Survival	80 mph (128.7 km/h)	80 mph (128.7 km/h)
Mast/Boom Diameter Accepted	1.250 - 1.625 in (32 mm - 41 mm)	1.250-1.625 in. (32 mm - 41 mm)
Wind Area	0.75 sq. ft. (.0697 sq. m)	1.1 sq. ft. (.102 sq. m)
Net Weight	4 lbs 14 oz (2.21 kg)	7 lbs.3 oz. (3.26 kg)
Stacking Distance (Min)	46 inches (1.17m) (1.7 wavelengths)	82 in. (2.08 m) (1.0 wavelength)
Frequency Range	432-438 MHz	144-148 MHz
Gain	14.0 dBdc	10.7 dBdc
Beamwidth	28-30 degrees	40-43 degrees (1/2 power E-plane) 50 degrees (1/2 power H-plane)
Sidelobe Level		-20 dB (E), -13 dB(H)
Front-to-Back Ratio	25 dB	max 22 dB
Ellipticity	3 dB Max.	max 3 dB
Power Rating	200 W/PEP	200 W/PEP
Connector	Type N	UHF (SO-239)
Polarity Switch Voltage and Current Requirements	9-15 VDC @ 30-60 mA	10-14 VDC @ 40-60 mA
VSWR (435-437 MHz)	Less than 1.5 when using fiberglass boom	less than 1.5:1

<http://www.hy-gain.com/man/pdf/UB-7030SAT.pdf>

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