

Attachment 1, SatCom Specifications

Antenna/Aperture/Conventional Dish Information (does not include associated electronics racks)

Antenna/Aperture name	Usage Example	Frequency (Band) / Polarization	Axial Ratio (dB) max	Type	Quantity per Ship	Beams	Transmit EIRP (dBW)	Receive G/T (dB/K)	Ant Envelop Size (L x W x H) inches	Weight (kgs)
NMT Protected	EHF SATCOM	43.5-45.5 GHz (Tx) / RHCP 20.2-21.2 GHz (Rx) / RHCP	Q-band: 2 dB Ka-band: 1.5 dB	Parabolic	2	1	Q-band: Classified	Ka-band classified	92" x 92" x 85"	544
NMT Wideband (small antenna)	SHF SATCOM	7.9-8.4 GHz (Tx) / RHCP 7.25-7.75 GHz (Rx) / LHCP 30-31 GHz (Tx) / RHCP 20.2-21.2 GHz (Rx) / LHCP	X-band: 2 dB Ka-band: 1.5 dB	Parabolic	2	1 for each band (simultaneous)	X-band: 63 dBW Ka-band: 57 dBW	X-band: 16 dB/K Ka-band: 19 dB/K	95" x 95 x 90.5"	544
GBS	High data rate receive broadcast	20.2-21.2 GHz (Rx) / LHCP	Ka-band: 1.5 dB	Parabolic	N/A will use NMT WB ants	1	N/A	Ka-band: 16.5 dB/K	N/A	N/A

Electronics racks Information (does not include associated Antenna/Aperture where applicable)

Rack Purpose	# of Racks per platform	Rack Size - Volume (cubic inches)	Rack Weight (kgs)	Rack Power (watts)
NMT Protected/Wideband	1	38880	209	12000
NMT Prime Power Interface (PPI)	<1	6600	122	Included above
GBS	N/A	N/A	N/A	N/A