DIRECTIONAL ANTENNA INFORMATION

1. Antenna Data

a. Diameter: 18.3 meters

b. Efficiency: 70%

c. Gain: 54 dBi @ 3.25 GHz

d. Transmit Shutoff features: Hardware, software, and operator controlled manual switch.

60-Foot (18.3-Meter) System

4	3	
	•	Manus Name

Downlink	S-band	X-band	
Frequency Range	2200-2400 MHz	8400-8500 MHz	
Polarization	Simultaneous RHC and LHC	Simultaneous RHC and LHC	
G/T	>28.3 dB/K	>38.5 dB/K	
Beamwidth	0.5 deg	0.13 deg	
Uplink	S-band		
Frequency Range	2025-2120 MHz		
Polarization	"On-the-fly" Selectable LHC or RHC		
Beamwidth	0.5 deg		
EIRP	>80 dBW		
Transmitter	2000 W Klystron (dual redundant)		

Antenna Pointing Contro

Program track (TLE, Spice-SPK, Chebychev, RA/DEC), S-band Autotrack, S/X-band Steptrack

CCSDS Compliant

Command, Ranging, Doppler & Telemetry, including Turbo (r1/2, 1/3, 1/4, 1/6), Convolutional (r1/2), Reed-Solomon, and Conv/R-S; Wide variety of modulation formats; Space Link Extension "SLE" (Fwd CLTU, RAF, & RCF services)