

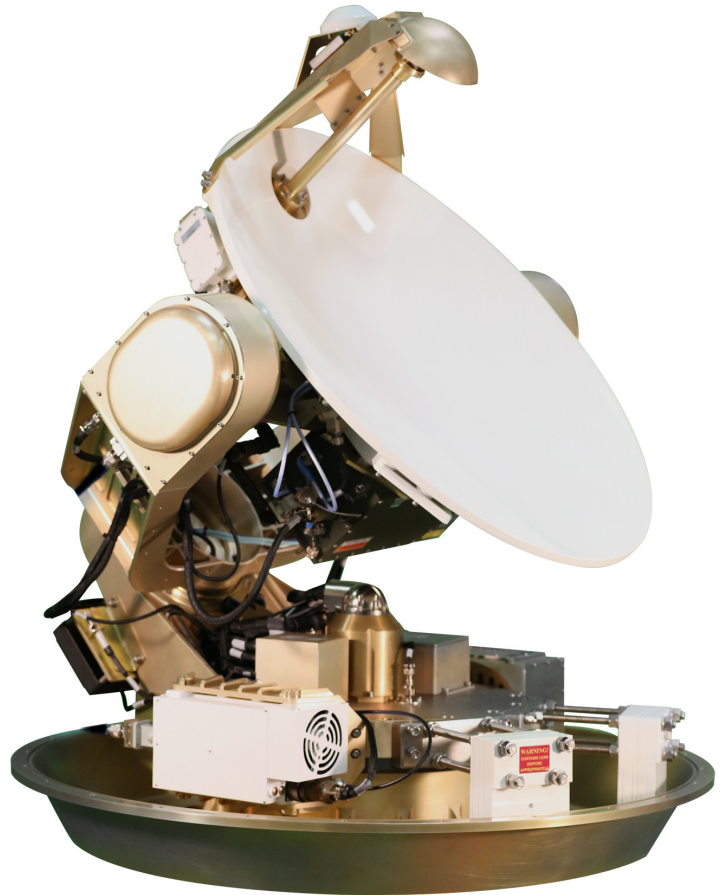
Model **SST-100**

Dual Mode Communications Antenna

TCDL & SATCOM Ku Band

Features:

- Eutelsat (Mx) Certified Antenna/Reflector
- High Performance, IMU Stabilized 4-Axis Positioner for High Sea State Operation
- Supports: (without any reconfiguration)
 - Ship to Satellite
 - Ship to Aircraft/Helicopter
 - Ship to Ship Digital Communications
- Simple UDP/IP Control Interface:
CPI Malibu Control GUI (Optional)
- Above Deck and Below Deck Equipment Including:
 - Power Supplies
 - Servo Amplifiers
 - Antenna Control Unit (ACU)
 - High Performance Radome
 - 4-Axis IMU



The SST-100 is a versatile, rugged dual mode Line of Sight (LOS) and Satellite Communication (SATCOM) antenna. In one payload, communications can be established from ship to satellite, ship to ship, and ship to aircraft/helicopter. Driven by direct drive motors, the antenna is fully stabilized to an accuracy of $.25^\circ$ and has been tested with a line of sight range of up to 100 miles. The antenna can also toggle between linear and circular polarization, a feature that further expands the versatility of the communication system.

The antenna system has been qualified through strenuous military grade environmental testing. Shock testing (using MIL-STD-810 simulating guns firing), endurance vibration testing (using IEC 60068 simulating personnel movement and engine excitation), and EMI testing (using MIL-STD-461 simulating electronic warfare) have all proven this antenna withstands the rigors of the world theater. This range of operational environments ensures that the communication lines between the ship and the outside world remains active for the entire operation.

Model SST-100

Specifications*

KEY PERFORMANCE VALUES WITH STANDARD HARDWARE COMPLEMENT

Feed/Dish	Elliptical Parabolic dish, coupled with a Gregorian reflector and corrugated horn feed	
Omni	Standard 1dBi omnidirectional feed	
Input Power	400 VAC 1 phase	
Volume (Above Deck)	40.5" Diameter, 44" Above Deck Height	
Volume (Below Deck)	13 U, 19" rackmount, 5 units	
Weight (Above Deck)	440 lb. Max	
Weight (Below Deck)	225 lb. Max	
Pointing	4 Axis Stabilized	
SATCOM	.23° Pointing accuracy	
LOS	1.5 dB max loss ship to ship or ship to aircraft/helicopter	
Pointing Field	0° to 85°, max roll 25°, max pitch 15°	
Velocity	Train	150°/s
	Level	100°/s
	X-Level	65°/s
Acceleration	Train	300°/s ²
	Level	100°/s ²
	X-Level	65°/s ²
	Rated to work at sea state 5	
Qualifications		
Vibration	IEC 68-2-6 "Conditions for equipment mounted on an engine"	
Shock	IEC-2-29, 30m/s ² FC, 15 m/s ² LCG 5000 Bump Impacts	
Temp	-25C to +55C Fed with ship air	
EMI	Conducted Susceptibility	MIL-STD-461D, MIL-STD-462, CS-101, CS-114, CS-116
	Radiated Susceptibility	RS-101, RS-103
	Conducted Emissions	CE-101, CE-102
	Radiated Emissions	RE-101, RE-102
Chemicals	High Salt Environment	
Antenna Specifications		
Gain	Rx: 37.3 dBi Tx: 38.7 dBi	
Sidelobes	ITU, FCC, Eutelsat Compliant	
G/T	14.75 dB/K	
EIRP	48 dBW	
Polarization	Dual Linear RHCP (TCDL)	
Operating Frequency	13.75-14.5 GHz (Tx), 10.95-12.75 GHz (Rx)	
Operating Frequency	14.40-14.83 GHz, 15.15-15.35 GHz, FLOPPABLE	
BUC	10W / 20W	

*Specifications subject to change