

# Sea Tel 14400

3-Axis marine stabilized antenna system compatible with C-Band and Ku-Band satellites

## 2010 Data Sheet

The most important thing we build is trust

### The Model 14400

The Sea Tel Model 14400 is our top-of-the-line TV-at-Sea™ system. It has always been the choice for the user who needs the largest possible offshore operating area and compatibility with all known and planned satellites. With the major tracking, reliability and stability improvements introduced recently, it is more than ever the antenna system of choice.

Available in C-band and Ku-band configurations or "dual-band" configuration that permits the same antenna to be used for both.

The 14400 is designed and built to pass the U.S. Navy's tests for vibration, shock and protection against RFI and EMI emissions.

And when it comes to vibration, this antenna actually exceeds Navy MIL-STD-167-1 standards.



Sea Tel's 3-axis stabilization system isolates the antenna from the ship's motion no matter how rough the weather and seas. The antenna system responds to ship's movement at a rate as fast as 90 degrees per second.

# COBHAM

### Specifications

- Antenna Gain C-band: 42.2 dB at 4.2 GHz
- Antenna Gain Ku-band: 49.6 dB at 12.5 GHz
- Min. EIRP C-band: 28 dBW
- Min. EIRP Ku-band: 32 - 33 dBW
- Dish Diameter: 3.6 m; 142 in
- Radome Diameter: 4.2 m; 168 in
- Radome Baseframe: Galvanized steel;
- Antenna Stabilization: 3-axis servo
- Built-In GPS: Automatic Satellite Acquisition
- Ship's Motion: +/- 15° Roll or +/-20° Roll and +/- 15° Pitch
- Roll & Pitch Response Rate: Unlimited
- Azimuth Range: Unlimited
- Full Elevation Range: -15° to +115°
- Reception: Single C-Band (linear or Circular)/ Single Ku-Band (Linear Only), Dual C-Band Linear, Quad Ku-Band linear, Dual C-Band Linear/Quad Ku-Band linear (Can be configured to receive 2 C-Band and 2 Ku-Band signals simultaneously or 4 Ku-Band signals simultaneously)
- RF Electronics: the proper choice of LNB's will be provided to match the ship's cruising area and satellite receiver selection.
- Ku-band: The entire frequency range for Ku-band satellite television is 10.7 to 12.75 GHz. Proper polarization is also an issue as both linear polarizations (horizontal & vertical) and circular polarizations (left & right) are used, and one configuration is not compatible with the other.
- C-band: The C-band frequency range is 3.7 to 4.2 GHz worldwide. Sea Tel TV-at-Sea™ systems are delivered with C-band LNB noise temperatures of 17 degrees K or better. The IF frequency in all cases is 950-1450 MHz
- Meets Navy MIL-STD-901D GRADE B shock standards and MIL-STD-461 EMI & RFI standards (including 200V/M).
- Accommodates any number of satellite receivers.
- Unmatched stabilization accuracy allows the system to detect and correct the slightest motion affecting the antenna's connection.
- HD ready

For further information please contact:

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