

Sea Tel Model 9711 TxRx

3-Axis marine stabilized antenna system compatible with C- or Ku-band satellites

COBHAM

Product Sheet

The most important thing we build is trust

Model 9711 TxRx

The Sea Tel 9711 system with 2.4m radical offset reflector is our most efficient C-band or Ku-band marine stabilized antenna system. It is Intelsat approved. The 9711 is available in 144" or 168" radome.

The C-band configuration of the 9711 antenna system operates on C-band A Pol, C-band B Pol or C-band linear all controlled from the DAC 2202. This eliminates the need for a technician to climb into the radome and manually change the feed. The switch over from one polarization to another can be accomplished in less than one minute.

The Sea Tel 9711 Ku-band system works with co polarized (co pol) or cross polarized (X pol) services which are also remotely selectable.

The Sea Tel 9711 system is fully compatible with OpenAmip, ROAM and Automatic Beam Switching (ABS) technologies. By combining multiple option files in a single modem, the user can make near seamless transitions from C-band circular A Pol to B Pol to C-band linear or from Ku-band co pol to cross pol.

The 9711 technology uses Generation 2 electronics in the pedestal control unit. This is the same reliable electronics used on XX09MK2 and XX10 series antenna systems, eliminating an external level cage, and combines the software-controlled motor driver assembly for better diagnostics and improved troubleshooting capabilities on all 3 axes.

Features and Benefits

- For C-band: circular/linear selectable feed allows automatic switch-over from circular to linear operation.
- For Ku-band: operate on co pol or X pol satellites.
- Fast switching time between networks: less than 1 minute.
- Fully compatible with OpenAmip, ROAM, and ABS protocol.
- Designed to meet MIL-STD-167 specifications for shock and vibration.
- Designed to meet Navy MIL-STD-901D Grade B shock standards and MIL-STD-461 EMI & RFI standards (including 200V/M).
- Fast satellite acquisition using built-in GPS antenna and proprietary algorithms.
- High performance stabilization and satellite targeting, including inclined orbit satellites.
- Available with air conditioner (optional).



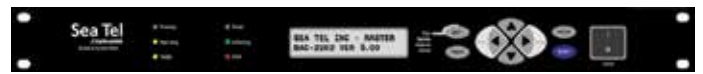
Sea Tel 9711 with Ku-band feed.

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Sea Tel 9711 with C-band feed.



Typical data for Model 9711 TxRx

System Characteristics		
Radome Dimensions	3.66m/144in D x 4.17m/164in H	
Pedestal Type	3 Axis: Azimuth, Elevation, and Cross Level	
Designed to Meet	MIL STD 167-1, MIL-STD-901D and MIL-STD-461	
Response Rate	>100°/sec	
Stabilization Accuracy	0.1° (RMS)	
Ship's Motion	+/- 25° roll or +/- 25° pitch	
	C-Band	Ku-Band
Antenna	94" (2.4m) offset	94" (2.4m) offset
Feed Assembly	C-band circular/linear selectable	Ku-band linear polarized (XP, Co pol)
Frequency Range	Rx: 3.4-4.2 GHz Tx: 5.850-6.725 GHz	Rx: 10.7-12.75 GHz Tx: 13.75-14.5 GHz
G/T	20.2dB/K (calculated) @ 3.95 GHz	28.2 dB/k (calculated) @ 11.85 GHz
Antenna Gain	Receive: 38.5 dBi @ 3.95 GHz Transmit: 41.7 dBi @ 6.18 GHz	Receive: 47.75 dBi @ 11.85 GHz Transmit: 48.45 dBi @ 14.25 GHz
Elevation Range	-15 to +100°	
Azimuth Range	Unlimited	

Typical data for DAC 2202 Controller

- Model DAC 2202
- Mounting Rack: optional slides
- M&C Ports: 1 Serial, 3 TCP/IP, 1 multi-user web browser support
- UDP upload port for update
- CommIF software
- Reformatted GPS output (GGA and GLL)
- Heading Input: NMEA 0183, SBS, Synchro, and no gyro mode
- Dimensions: 19" X 1.75". 1U rack space

SEA TEL 9711 IMA SYSTEMS WITH C/KU SWITCHABLE FEEDS

3-axis marine stabilized antenna system compatible with C, Ku and X-band satellites

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The Sea Tel 9711 IMA (Integrated Maritime Antenna) System combines a C-band circular/linear Switchable Feed as well as a Ku-band cross/copol switchable feed with sub-reflector. The combination allows switching from C-band operation to Ku-band operation electronically and eliminates the need to manually change the feed. The Ku-band sub-reflector has been designed to optimize the RF performance of the 2.4 meter antenna. This patented state-of-the-art design is second to none when it comes to RF performance.

Tx/Rx All-In-One Antenna

The Sea Tel 9711 IMA features a 2.4 meter radical offset antenna for both the C-band and Ku-band operation. This offset design provides the most efficient 2.4 meter antenna in the market today. Software has been specially designed to switch from C to Ku-band operation in a matter of seconds

Easy Automation

By eliminating the need to manually change feeds when switching between bands, the Sea Tel 9711 IMA is incredibly cost effective. A technician is no longer required to be dispatched for making configuration changes, eliminating offline time for a vessel while switching between networks.

Seamless Operation

The Sea Tel 9711 IMA system is fully compatible with OpenAmip and ABS technology. By combining multiple option files in a single modem, the user can make near seamless transitions from C band circular A Pol to B Pol, C-band linear, and Ku-band satellites.

State-of-the-art Platform

The Sea Tel 9711 IMA Systems utilize the IMA architecture currently used on our XX12 series products. It features an Integrated Control Unit (ICU) that offers a single box electronic control solution to maintain the best and most efficient pointing accuracy. With its extended web based secured user interface, built-in remote management capabilities, it offers easy integration into network management systems through its Media Xchange Point (MXP)

Secure Solution

The web user interface, accessible from practically any internet enabled device, including mobile devices, features Secured Socket Layer (SSL) password protection and multi-level data analysis capability for ease of use and added security. The Sea Tel 9711 IMA systems with C/Ku switchable feeds are the cutting edge, top-of-the-line solutions for your top performance maritime communication needs.



SEA TEL 9711 IMA SYSTEMS WITH C/KU SWITCHABLE FEEDS

3-axis marine stabilized antenna system compatible with C, Ku and X-band satellites

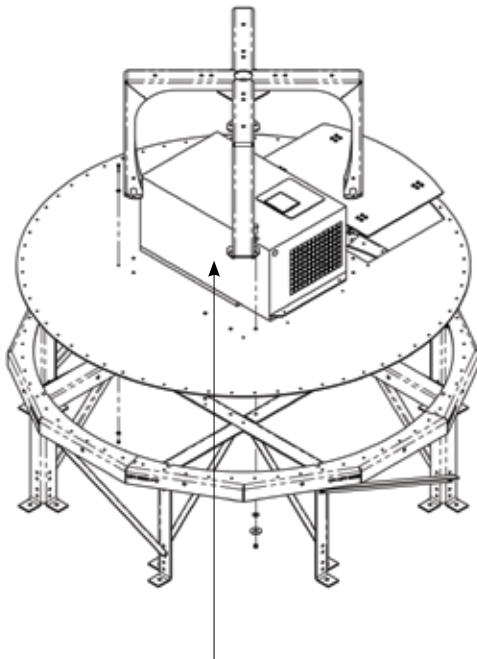
Typical Data for the Sea Tel 9711 IMA

SYSTEM CHARACTERISTICS

Radome	366 cm (144 in) typical; 427 cm (168 in) optional	
Pedestal Type	3-axis: azimuth, elevation, and cross level	
Specifications	MIL STD 167-1	
Response Rate	>100°/sec	
Stabilization Accuracy	0.1°	
Ship's Motion	+/- 25° roll, +/- 25° pitch	
	C-BAND	KU-BAND
Antenna	2.4 m (94 in) offset	2.4 m (94 in) utilizing a sub-reflector
Feed Assembly	C-Band circular/linear selectable	Ku-Band linear polarized (XP, Copol)
Frequency Range	Rx: 3.4 to 4.2 GHz Tx: 5.850 to 6.725 GHz	Rx: 10.7 to 12.75 GHz Tx: 13.75-14.5 GHz
Tx Gain	41.7 dBi @ 6.18 GHz	49.3 dBi @ 14.25 GHz
Rx Gain	38.5 dBi @ 3.95 GHz	47.3 dBi @ 11.7 GHz
System G/T	19.0 dB/K @ 3.95 GHz	27.0 dB/k @ 11.7 GHz
Elevation Range	-15° to +100°	-15° to +100°
Azimuth Range	Unlimited	Unlimited

Typical Data for Media Xchange Point (MXP)

- Standard 19 inch 1U Rack Mount. (Slide Rails Optional)
- 43 x 43 x 4.35 cm / 17 x 17 x 1.75 in
- 110/220VAC, 47-63 Hz, Single Phase
- 3.0 kgs / 6.6 lbs
- 4 Ethernet Ports
- 1 SMA connector (Rx from RJ)
- 1 F connector (RJ to diplexer)
- 8 status LED's
- USB device (Mini B)
- 2 RS-232 pass through ports
- 1 NMEA RS-232 serial port
- 1 RS-232 console port
- SBS & Synchro gyro inputs
- Aux 1N1 & Aux 1N2
- SW1,SW2,SW3,SW3A,SW4,SW4A (I/O)



Air conditioner (optional)

