

# Model 9711 and QOR TxRx

3-Axis marine stabilized antenna system with QOR™ technology compatible with C and Ku-band satellites

**COBHAM**

2011 Data Sheet

The most important thing we build is trust

## Model 9711 and QOR TxRx All-in-One Antenna System

Quadrature Oriented Reflectors, QOR technology based antenna systems are the leading-edge systems for truly global operations. QOR technology facilitates full flexibility of operation on C and Ku-band networks and requires minimal manual intervention while switching from C-band circular to C-band linear, A Pol to B Pol, or from C-band to Ku-band.

The 9711 QOR system combines a 2.4m C-band antenna with a 1.2m Ku-band antenna on the same pedestal. In addition, the C-band antenna utilizes a feed that combines both circular and linear operation, all in one product. The

user can switch from C-band to Ku-band with a simple push of a button.

The software calculates the antenna's offset values and targets according to the user's preferences. The 9711 QOR antenna operates on C-band A Pol, C-band B Pol, C-band linear, Ku-band Cross Pol, and Ku-band Copol. This eliminates the need to climb into the Radome to change the feed. The switch over from one network to another can be accomplished in less than one minute.

The 9711 QOR 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.

The 9711 Technology uses Generation 2 electronics in the pedestal control unit. This is the same electronics used on XX09MK2 and XX10 series antenna systems, eliminating the need for an external level cage, and combines the motor driver assembly which performs diagnostics and improves troubleshooting capabilities on all 3 axes.

QOR technology eliminates the need for a second antenna on the vessel. The QOR based antenna systems provides a significant productivity improvement and an all-in-one communication solution for truly global operation.

## Features and Benefits

- Circular/linear selectable feed allows automatic switch-over from C-band circular to C-band linear operation.
- Fast switching time between networks: less than 1 minute.
- 1.2M Ku-band antenna allows for automatic switch-over from C to Ku-band operation.
- Fully compatible with OpenAmip and ABS protocol.
- Software allows for completely different set of DAC parameters for C and Ku-band antenna that is easily selected from the DAC front panel or from a CLI interface.
- 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 tracking even in inclement weather.



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## 9711 Options:

- 9711: C-Band, linear and circular
- 9711QOR: C-band, linear and circular, Ku-band, Cross Pol and Copol



## Typical data for 9711 and QOR

System Characteristics		
<b>Radome</b>	144" typical. 168" optional	
<b>Pedestal Type</b>	3 Axis: Azimuth, Elevation, and Cross Level	
<b>Designed to Meet</b>	MIL STD 167-1, MIL-STD-901D and MIL-STD-461	
<b>Response Rate</b>	>100 Deg./sec	
<b>Stabilization Accuracy</b>	0.1 Deg.	
<b>Ship's Motion</b>	+/- 25 deg roll, +/- 25 deg pitch	
	C-Band	Ku-Band
<b>Antenna</b>	2.4M offset	1.2M
<b>Feed Assembly</b>	C-band circular/linear selectable	Ku-band linear polarized (XP, Copol)
<b>Frequency Range</b>	RX: 3.4-4.8 GHz TX: 5.850-7.025 GHz	RX: 10.7-12.75 GHz TX: 13.75-14.5 GHz
<b>G/T</b>	20.2dB/K (in Radome) @ 3.95 GHz	20dB/k (in Radome) @ 11.701 GHz
<b>Antenna Gain</b>	Receive: 38.5 dBi @ 3.95 GHz Transmit: 41.7 dBi @ 6.18 GHz	Receive: 41.6 dBi @ 12.5 GHz Transmit: 43.0 dBi @ 14.25 GHz
<b>Elevation Range</b>	-15 to +100 degrees	-15 to +115 degrees
<b>Azimuth Range</b>	Unlimited	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

For further information please contact:

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