Radar Systems Parameters:

Multi Role Radar (MRR) System

The MRR system provides long range 3D air and surface surveillance, tracking, target evaluation, and weapon control. It is designed for use on patrol boats, corvette class ships, and as a self defense radar on frigates. The radar air surveillance capability is 180Km and surface surveillance capabilities can reach beyond the horizon. The antenna is electronically scanned to provide a 3D target bearing, elevation, range and speed. The operating parameters are as follows:

MRR

Frequency Band	C Band (5.25 GHz to 5.85 GHz)
Pulse length	up to 30mS
Transmit	100kW Peak
Duty Cycle	2%
Antenna Beam Width	7.9° Vertical, 1.75° Horizontal
Antenna Gain	29.5 dB
Frequency Tolerance	0.1%
ERP	10KW (Peak distributed over 360° rotation)
Emission Designator	3M4Q3N
Modulating Signal	Chirp

STING E-O Mk 2 Radar System

The STING E-O Radar System is used as a target tracking system. It is suitable for various size naval vessels. It provides automatic target acquisition through X & Ka Band radar as well as passive Electro-Optical capabilities. The Sting E-O Radar system supports functions such as sector search, missile launch detection, projectile position during gun fire and assessment support. The operating parameters are as follows:

Sting E-O

Frequency Band	X Band (8.5 GHz to 9.6 GHz)
Peak Transmitted Power	500 Watts
Max Duty Cycle	30%
ERP	407 kW
Frequency Tolerance	0.1%
Emission Designator	5M0Q3N
Modulating Signal	Chirp
Antenna Gain, far field	37dB
Beam Width	2° Vertical & Horizontal

Frequency Band	Ka Band (34.5GHz to 35.5GHz)
Peak Transmitted Power	40 Watts
Max Duty Cycle	30%
ERP	234 kW
Frequency Tolerance	0.1%
Emission Designator	5M0Q3N
Modulating Signal	Chirp
Antenna Gain, far field	44.5dB
Beam Width	2° Vertical & Horizontal

Scout Radar System

The Scout Radar system is a surface surveillance and tactical navigation radar system. It operates in a low power (<2 watts) frequency modulated continuous wave (FMCW) manor. The operating parameters are as follows:

Scout

Frequency Band	X Band (9.2GHz to 9.5GHz)
Power Level	2 Watts (Mean)
ERP	15.8 Watts (Mean)
Frequency Tolerance	0.01%
Emission Designator	48M0F3N
Modulating Signal	FMCW
Beam width	1.4 Degrees
Antenna Rotation	24 RPM
Antenna Gain	32 dB