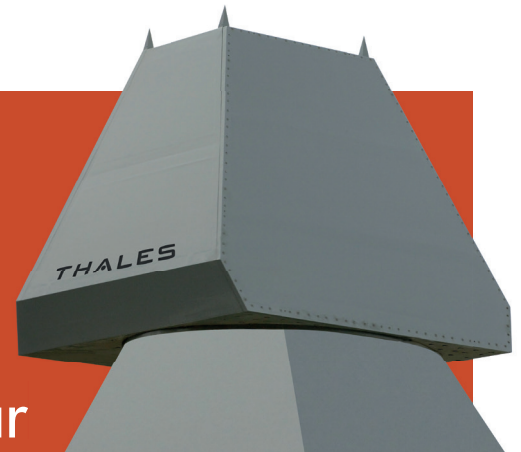


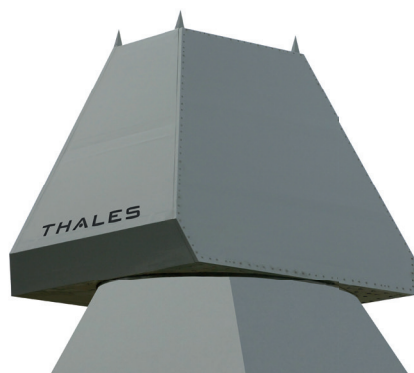
Herakles is one of the most advanced naval radars world-wide. A true multifunction radar, it has convincingly demonstrated its capabilities on board of the Formidable class and FREMM class vessels. The system offers high-performance ECCM features as well as low radar cross section to optimize vessel stealth. Herakles represents the state-of-the-art in naval radar technology with integrated IFF with mode 5 and mode S. Being fully solid-state and with redundancies for vital functions, it offers an unmatched availability.

- Designed to be the sole radar on-board high-value ships
- Long range surveillance concurrently with area and self-defence in one single mode
- Multi-beam surveillance for optimized dwell-time over full sector
- Excellent littoral performance
- Optimal integration with ASTER missiles, qualified with live firings

HERAKLES

Multi Function radar designed to be a naval vessel's sole radar





HERAKLES

Phased Array Multi Function Radar

Functional Aspects

- Smart management of the phased array antenna and use of a wide variety of waveforms to perform concurrently
 - medium and long range coverage 3D air and surface
 - area defence
 - target tracking
 - raid analysis and target classification support
 - weapon, missile and gun control (splash-spotting).
- Integrated IFF (mode 1, 2, 3/A, C, 4 or NSM, mode 5 and mode S)
- Automatic fast track creation process: early detection, confirmation, and first track creation to optimise defence system reaction time in threat zones
- Huge firing power
- Non cooperative target recognition
- Simple to operate
- Easy maintenance - minimum personnel training.

Performance data

3D air domain	250 km
Surface domain	80 km
Coverage	0 to 250 km, 360° in azimuth, 0 to 70° in elevation
Track capacity > 400 air + surface	
Monopulse + dedicated tracking for all air targets	
Splash spotting function for fire control on surface targets	
Fully compatible with Aster 15/30 missiles	

Technical Data

Only one mode to perform Surveillance and Anti Air Warfare with ASTER in all weather conditions	
Antenna	
Antenna rotation speed	60 rpm
Two axis mono pulse phased array	
Air cooling	
Transmitter	
Frequency band	E/F band (S-band)
Solid-state technology	
Processing	
State of the art technology	
Digital pulse compression	
Finite Impulse Response Doppler filtering (FIR)	
Rapid loop to support ASTER guidance	



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