



PHALANX

Close-In Weapon System (CIWS)



SPECIFICATIONS

Gun Type	M61A1 20mm cannon
Weight	13,600 pounds (6,169 kg)
Rate of fire	Dual fire rate, 3,000 or 4,500 shots per minute
Electric power	Three-phase, 440V, 60 Hz, 18kw in search, 70kw in track
Gun drive	Pneumatic
Magazine	1550-round enhanced lethality cartridge
Mount drive	Electric
Search radar	Ku-band, digital MTI
Track radar	Ku-band, pulse doppler monopulse
EO sensor	FLIR imaging system with automatic ACQ tracker
Seawater cooling	20gpm, 30psig

General Dynamics Ordnance and Tactical Systems produces the 20mm M61A1 Gatling gun and ammunition handling system for the Phalanx Close-In Weapon System prime contractor Raytheon.

Phalanx defends navy ships against a variety of anti-ship threats, such as anti-ship missiles and aircraft, small high-speed surface craft, small terrorist aircraft, helicopters and surface mines. Phalanx is the only deployed CIWS capable of completely autonomous searching, detection, evaluation, tracking, engagement and kill-assessment functions.

The Block 1B Surface Mode configuration builds on earlier capabilities with the addition of an Optimized Gun Barrel for an improved dispersion pattern and an integrated Forward-Looking Infrared System. The new OGBs are 18 inches longer than the original M61A1 gun barrels, are substantially thicker, and include both a barrel brace and muzzle restraint to improve longevity and projectile dispersion patterns. The Enhanced Lethality Cartridge provides a 50 percent increase in penetration mass. The Phalanx FLIR provides a unique capability to search, track and engage littoral warfare threats while simultaneously providing a significant improvement in ASM engagement ranges.

Phalanx production started in 1978 with orders for the sale of 23 U.S. Navy and 14 foreign military systems. With over 850 systems now produced for 24 nations, production contracts are in place to carry further development well into the 21st century.

GENERAL DYNAMICS
Ordnance and Tactical Systems

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