PROTECTING NAVAL PLATFORMS

C-GUARD

Decoy Launching System

Terma has more than 25 years of experience protecting naval platforms from above and below water threats and provide the C-Guard system for effective protection against coordinated multi-threat / multi-directional attacks by missiles and torpedoes.

From Patrol Vessels to Frigates and Command Ships, coordinated attacks pose a great threat to naval platforms due to very short response time from threat detection to threat response.

C-Guard's rapid response and constant threat evaluation is key in building a multi layered 360° defense to stepwise defeat multiple coordinated attacks.

C-Guard is integrated with major Combat Management Systems, and more than 200 C-Guard systems are currently in operation worldwide. C-Guard relies on combat proven 130 mm NATO decoys and a proven mechanical launcher design without moving parts, guaranteeing high availability and lowest total cost of ownership.

Operational Capabilities

Automatic Countermeasure Evaluation
C-Guard can operate in three different modes: Manual, Semi-Automatic, or Automatic mode. In Automatic mode, C-Guard automatically evaluates and executes the most effective countermeasures for defense by seducing incoming missile threats – greatly reducing stress load on the operator under multi-threat attacks.

In Semi-Automatic mode C-Guard provides two firing scenarios for the operator to choose from – for the most effective countermeasures to layer the defense by distracting and/or seducing incoming missile and torpedo threats. The two firing scenarios are automatically reevaluated as the engagement progresses.

Advanced Protection
C-Guard always protects own ship and avoids re-acquisition for own unit when the missile passes through the decoy cloud.

C-Guard supports protection of friendly or neutral vessels by minimizing the risk that own vessel threat avoidance will place other vessels inside a missile's field of regard or range gate.

Integration with Combat Management Systems
C-Guard can operate both as a stand-alone system interfacing directly to sensors and other subsystems and as a fully integrated Combat Managment System and is currently integrated with most major Combat Management Systems (CMS).

Product Characteristics

High Protection Level
C-Guard's threat evaluation algorithms are based on comprehensive co-operation with Navies, research institutes, and decoy manufacturers and are continuously updated and improved in order to secure a high protection level against new generations of missiles and torpedoes.

C-Guard supports distraction and seduction mode for a multi layered defense. The purpose of distraction mode is to lure a missile to lock-on a decoy instead of own unit. In case a missile or torpedo has lock-on to own unit, the purpose of seduction mode is to transfer the locked missile from own unit to a decoy and to separate own unit and decoy.

Continuous Decoy Development

C-Guard relies on combat proven nonproprietary 130 mm NATO decoy ammunition. With more than 600 Decoy Launching Sytesms in service relying on the 130 mm ammunition, supply and future development of new types of decoy ammunition is assured.

Expandable Architecture and Flexibility

C-Guard is scalable from 12 to 48 tubes on a vessel and supports a mixed use of decoy types and large payloads minimizing the needed number of reloads during coordinated attacks.

Mission Proven and Reliable

C-Guard legacy and reliability is built on decades of missions on a vast number of vessels, ranging from Patrol Vessels to Frigates and Command Ships securing against unexpected missile and torpedo attacks during embargo operations and other United Nation (UN) operations. C-Guard's reliability stems from a design with nonmoving mechanical parts requiring limited maintenance.

Ease of Operation

C-Guard's user-friendly interface is designed with special focus on fast execution of engagement, overview, and minimal likelihood of mistakes. To reduce the likelihood of mistakes even more, C-Guard's firing tubes are fitted with decoy ammunition identification markings for hassel-free reloading.

C-Guard can be controlled locally on a touch screen, from C-Flex or other CMS and allows for adaptation of system behavior to own special requirements.

Ease of Implementation

- Short delivery lead time (< 12 month for std. systems)
- Installation, test, and commissioning (< 1 month for std. systems)
- Minimum maintenance cost and proven spare part and training program
- No ITAR items.

Key Benefits

- Multi-threat engagements
- Fully Automated Operation
- Support for cost efficient standard NATO 130 mm decoys and torpedo decoys
- Effective multi layered 360° Horizontal coverage
- Easy to integrate and already integrated with major Combat Management Systems
- Market leading total cost of ownership.

Operating in the aerospace, defense, and security sector, Terma supports customers and partners all over the world. With more than 1,600 committed employees globally, we develop and manufacture mission-critical products and solutions that meet rigorous customer requirements.

At Terma, we believe in the premise that creating customer value is not just about strong engineering and manufacturing skills. It is also about being able to apply these skills in the context of our customers' specific needs. Only through close collaboration and dialog can we deliver a level of partnership and integration unmatched in the industry.

Our business activities, products, and systems include: command and control systems; radar systems; self-protection systems for ships and aircraft; space technology; and advanced aerostructures for the aircraft industry.

Terma has decades of hands-on know-how in supporting and maintaining mission-critical systems in some of the world's most hostile areas. Terma Support & Services offers through-life support of all our products to maximize operational availability, enhance platform lifetime, and ensure the best possible cost of ownership.

Headquartered in Aarhus, Denmark, Terma has subsidiaries and operations across Europe, in the Middle East, in Asia Pacific as well as a wholly-owned U.S. subsidiary, Terma Inc., with offices in Washington D.C., Georgia and Texas.

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