

c4i *communication*

EXPERIENCE THE DIFFERENCE
YOUR SECURITY & SAFETY PRODUCTS



NRCS 40 40MM NAVAL REMOTE CONTROL SYSTEM



The NRCS 40mm Naval Remote Control System provides highly accurate firepower for all types of naval vessels. The system is remotely controlled and operated from a protected position inside the naval vessels compartment. The main armament is a 40mm L70 automatic cannon .

NRCS 40mm is operated by a single crew member or a dual user system with a commander override capability, controlling the sight and weapon from a control panel located within the protected cabin. In addition to system's control, the console also provides image-processing and enhancement, improving performance at night and under limited visibility conditions. In house development of complete system and built in components makes it easy for DLS system company to adjust the system to specific customer requirements.

40mm Naval Remote Control System is:

- Optimized for firing in static and moving scenarios
- Suitable for naval mount that is easy to install in any type of ship
- Highly reliable
- Operated from inside the naval vessels compartment
- Protection up to Level V by STANAG 456g
- Flexible and designed for customer specific needs.
- Advanced design Remote Control System, high readiness for operation with low maintenance requirements

40mm Naval Remote Control System is intended for the installation on any type of ship or other combat platforms.

Armament and surveillance sighting devices are intended for surveillance, sighting, measuring the target distance and destruction of: live force, combat and non-combat material and technical systems on the ground, water and in the air, at the following firing distances:

- Maximum firing distance for live force and soft skin vehicles: up to *12500 m;
- Maximum firing high for targets in the air: up to *8700m,
- Maximum firing distance for vessels: up to *10000m

*Depending on the ammunition.

Operation parameters and requirements

Fire control system have the required control, ballistic calculations and corrections in order to ensure the accuracy of NRCS 40mm have gyro stabilization in two axes for both sighting devices and the main weapon.

NRCS 40mm have a mechanical and software safety limitation in order to prevent firing in critical areas.

Fire control system have auto tracking video system for moving targets.



NRCS 40mm is able to track stationary and moving targets when the vessel is stationary or when the vessel is moving:

- Up to 10 km/h on WMO Sea State Code 5 *
- Up to 40 km/h on WMO Sea State Code 4 *

* depending on the configuration of the vessel

- NRCS 40mm have the following firing capacities (the firing line in relation to the platform):
 - Elevation +80°
 - Depression -5°
 - Traverse/azimuth n x 360°
 - Max angular rate in azimuth: 1.2 rad/s,
 - Max angular rate in elevation: 1.0 rad/s,

Main sub-systems of the NRCS 40mm

- Armored body of NRCS 40mm with a bearing, gun and machine-gun cradle, feeding system ,
- 40 mm gun with twin feeding system (option),
- Integrated gunner's surveillance and sighting system with a ballistic computer and control panel
- Panoramic surveillance system of the vehicle commander(optional),
- System for the NRCS 40mm power supply, transmission of video and digital command/control signals
- Gyro-stabilized electric system drive for laying the gun in azimuth and elevation
- Manual system for laying the gun in azimuth and elevation (auxiliary system) (optional)

LWRC body

The basic structure of the turret is made of a welded structure of steel. The shield has an assembling structure (the thickness and selection of materials depend on the customer's requirements and the level of ballistic protection).

The receivers for ammunition are located in the rear part of the body.

NRCS 40mm Fire Control System

The fire control system includes the sighting device, weapon drive system with gyro stabilization, ballistic computer with appropriate software and command and control unit (for the gunner and commander).

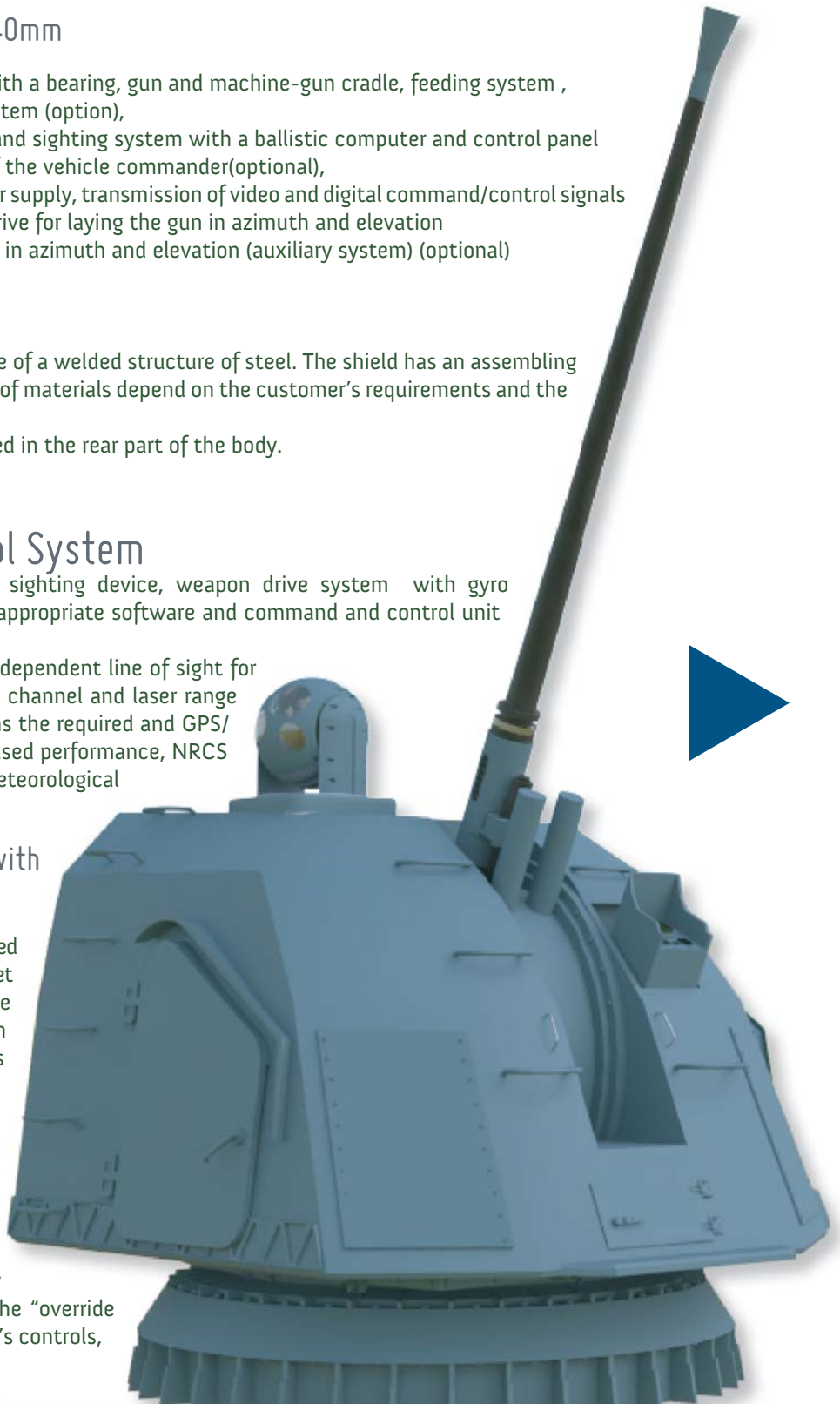
The gunner's sighting device have a independent line of sight for surveillance and firing with day, night channel and laser range finder. The fire control system contains the required and GPS/ North finder. For the purpose of increased performance, NRCS 40mm also optionally contain a meteorological station.

Gunner's working station with

Display and control panels

The HMI of the gunner control unit is used for main guns cocking, loading, target distance measuring with laser range finder, firing, controlling of the FCS with optoelectronic sighting system as well as other implemented subsystems

The optional commander's station provides for full override, when the commander takes control over main weapon laying, sighting and firing at the target, and all other functions normally performed by the gunner. Selecting the "override" automatically switches off the gunner's controls, gives the indication on both displays.



Gunner's working station consists of:

- Main switch for gunner's working station
- Control panel for turret control with turret status display and HMI control
- Ballistic computer for controlling the gunner's working station subsystems.
- HMI Multifunctional display
- Gunner's control handle
- Control panel for controlling the automatic charger and selecting the type of projector
- The gunner's Opto-electronic observation unite
- Gunner's analog optic aiming devices
- Wind velocity data from the weather probe automatically or entered manually by the computer.
- The temperature and pressure display of air read by the weather probe automatically or entered into the computer manually.



Automatic video tracker

The Automatic Video Tracker (AVT) accepts video signal from an optoelectronic system camera as input, tracks and provides the location of the chosen object with respect to the center of Field of View of the camera as output. The AVT can be used to track static or moving objects from a static or moving platform. By interfacing AVT with a camera on a turret it is possible to continuously follow a moving object.

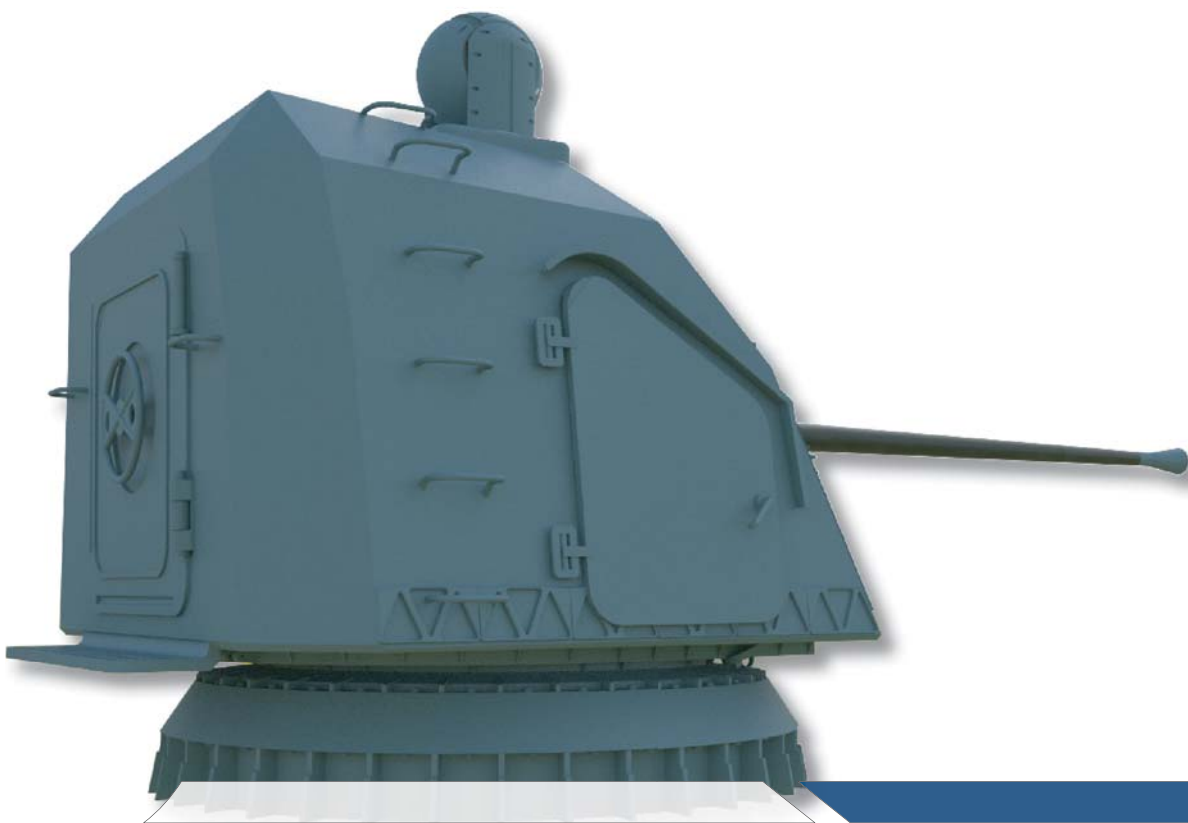
The gunner sight and optional independent commander sight are composed of:

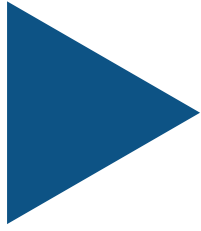
- Thermal Imaging System (TIS) and day/night CCD video camera.
- Laser Range Finder (LRF) to acquire the distance to the designated target up to 10km.
- The sensors have an effective range of at least 12500m system.
- Detection, recognition and identification are based on NATO STANAG 4347.
- The TIS and day/night camera system have a continuous zoom capability.

Fire Control System

The Fire Control System (FCS) integrate the optoelectronic sighting system, Central computer, ballistic computer, turret and guns drive with command and control unit/station (for the gunner and commander (optional))

The NRCS 40mm features advanced fire control system with integrated battle management system. The fire control features gunners (optional commander's) independent observation sight stabilized in both axis. The multi-channel gunner sight includes the optical and thermal channel.





LEARN MORE: c4icommunication.com

FOR MORE INFORMATION: contact@c4icommunication.com or +1 (302)981.1340