

# Rugged computers and special electronics in CV90 IFV Vehicle

## Introduction

This case study describes how the Norwegian Army utilizes MilDef rugged computers and special electronics to digitize the CV90 IFV (Infantry Fighting Vehicle) in order to provide situational awareness from platoon to brigade level.

The computers and other components have been specially chosen for use in the CV90 forward command and armoured reconnaissance vehicles to give cost-effectiveness and environmental requirements for C2-systems in armoured vehicles.

## Customer

Norwegian Army domestic and international.



Photo: Frederik Ringnes/Forsvaret

MilDef develops rugged electronics for military applications. With reference cases from more than 20 countries and experience from over two decades of supplying mission-critical equipment, the company has collected a wealth of domain-specific knowledge.

The MilDef white paper series shares some of our proven solutions for digitalization, developed in close collaboration with our customers.

For more information, visit [www.mildef.com](http://www.mildef.com).



### Description

The use of MilDef 19”/2 products in the CV90 is the result of a collaboration between MilDef and NDMA (Norwegian Defence Material Agency). The Norwegian Army identified the need for modular rugged computers and components that could endure the conditions of being mounted in IFVs.

MilDef products meet the toughest requirements for rugged equipment; fanless units for reliability, environmental requirements according to MIL-STD 810, and MIL-STD-461 Ground Army EMC. On request, they may also be certified for TEMPEST and other military standards.

By mounting MilDef 19”/2 products in the CV90 it is enhanced with a modern computing solution in a combat environment. The reliability of the MilDef products is essential to the user, relying on the complete IFV to function under all conditions in modern warfare.

With more than 140 vehicles currently in operational use in the Norwegian Army, they stand as one of the most modern fighting vehicles in the world today according to former Chief of the Army, Major General Odin Johannessen;

- With the CV90s Integrated Combat System, this is the world’s most modern fighting vehicles. This is the Army’s F-35, a joint resource and a “game changer” that gives us situational awareness and understanding.

The combination of a modern fighting vehicle and state of the art information technology components from MilDef, enables these Norwegian fighting vehicles to lead the charge in NATO in terms of new technology, according to Second in Command of the NDMA, Rear Admiral Bjørge Aase;

- “.....This fighting vehicle is fully digitalized with an open architecture where new sensor systems are integrated. Norway is a pilot in NATO when it comes to adapting available technology on this type of land platform....”

The extensive MilDef portfolio of 19”/2 products, the ability to modify existing products, and the capacity to develop completely new products based on customer requirements, ensures the Norwegian Army longevity and robustness in their choice of MilDef as a trusted partner.



Keyboard



Computer



Router



KVM switch

## Products

MilDef products used in the Norwegian Army CV90 consist of computers, routers, KVM switches and keyboards.

### Computer

MilDef CS/ST Series <https://mildef.com/products/19inch2/computers/>

### Router

MilDef RM200 Series <https://mildef.com/products/19inch2/routers/>

### KVM switch

MilDef KSW500 Series <https://mildef.com/products/19inch2/customer-projects/>

### Keyboard

MilDef KBD200/300 Series <https://mildef.com/products/accessories-2/keyboard/>

## Key benefits

- Small form factor products
- Fanless systems
- Form Fit Function > 5 years
- Fast deployments
- Low lifecycle cost
- Turnkey Systems

## Contact information

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