

# DEFENSE & SECURITY

PROJECTION  
PROTECTION



Force  
Projection



Surveillance Optronics  
& CBRN Detection



Cyber Intelligence  
& Security





# LANDING CRAFT

The L-CAT® is an innovative, fast catamaran landing craft developed by CNIM to meet the needs of the most modern amphibious forces. It can conduct shore-to-shore missions or deploy from the well deck of LHD and LPD amphibious ships.



## L-CAT® High Speed Connector

The L-CAT® can deploy either a fully motorized infantry platoon complete with its vehicles and equipment, a single heavy (M-1, Leopard 2) **main battle tank**, or up to 100 tons of military or disaster relief equipment. Thanks to its innovative variable draft system, the L-CAT® is **2-ships-in-1: a fast connector and a reliable landing craft**.

With its fore and aft ramps, the L-CAT® is a **full Ro-Ro vessel**, enabling door-to-door operations with amphibious ships and loading/unloading operations from any existing slipway or quay. In the absence of port facilities, it can easily operate in shallow water and land its cargo directly on most beaches.

### Shore-to-Shore operations

Rapid deployment • Offensive & defensive operations • Logistical support for distant naval & military installations • Quick access to littoral areas after a natural disaster

### Ship-to-Shore operations

Compliant with NATO well-decks • Fast cycle times (loading & unloading) • Excellent beaching capabilities



## Military and Civilian Operations on a Global Scale

The L-CAT® has been in service since 2011 in the French Navy and has proven its ability to support the French Armed Forces on a global scale during military and civilian operations. The L-CAT® allows **quick deployment** of heavy equipment during humanitarian interventions (aid to populations after natural disasters, recovery of isolated nationals, and the transfer of public works equipment).

In April 2015, the L-CAT® has been a **key asset** for the French Navy during a high-risk rescue operation for stranded civilians in Yemen. The speed and the beaching capabilities of the L-CAT® were critical to mission success and 44 nationals were taken out of harm's way.





## BRIDGING SYSTEMS

CNIM has a 30-year track record in providing armed forces with gap crossing capabilities to enable armored vehicles/civilian vehicles to cross dry and wet gaps during both military and disaster relief operations.

To adapt to Armies' changing operational needs, CNIM continually improves its gap crossing capabilities to suit the operational needs of today's modern armed forces.

### Motorized Floating Bridge

#### Tactical Wet-Gap Crossing MLC 80 Vehicles

CNIM's Motorized Floating Bridge (PFM) provides today's ground forces with the capability of rapidly crossing wet gaps and obstacles such as large rivers and lakes. The PFM can be deployed as either a **continuous floating bridge** or as a **roll-on roll-off ferry** enabling vehicles up to class MLC 80 to cross over wet gaps.

In bridge configuration, the PFM can substitute itself to a destroyed/damaged bridge, providing continuous crossing and allowing the quick restoration of vehicle and pedestrian traffic.

In ferry configuration, the PFM is capable of continually carrying military and civilian equipment across wet gaps in both a military and disaster relief application.



#### Tactical use

Reduced Staff • No auxiliary boats • Motorized & autonomous sections • 360° maneuverability • 100 m long bridge built in 30 minutes

#### Mechanized, rugged, reliable

Low Maintenance • Combat & field proven

#### Dual application

Military or disaster relief operations

### Modular Assault Bridge

#### High Speed Gap Crossing for MLC 80 Vehicles

The modular assault bridge (PTA) is a unique bridging system which can be deployed very quickly with minimal personnel and can withstand the heaviest military/civilian vehicles. It has been in service with the French Armed Forces since 2009.

#### Modular bridging capacities

14.3 or 26m bridge, depending on the length of the gap  
Crossing capabilities for MLC 80 vehicles

#### High mobility

All terrain maneuverability • maximum speed 70 km/h  
• wheeled chassis (10x10 chassis)

#### Tactical launching system

Fully automatic: 10 minutes, 2 operators, 26m long bridge • IED protected cabin • Day & Night operations





## SURVEILLANCE OPTRONICS

Bertin Instruments offers leading-edge optronics devices dedicated to Detection, Recognition & Identification (DRI) of targets in all conditions and environments.



### **FusionSight®**

Digital Night Vision Enhancer

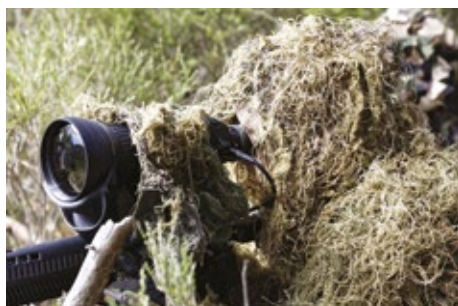
A patented, smart fusion complements each viewing mode offering the user the best detection capability and situation awareness in any day and night condition. Designed for a mobile surveillance team, this intuitive digital device allows image proof collection and live streaming on an external screen.



### **PeriSight®**

Optronics system for Land Situational Awareness (LSA)

PeriSight® is a network of imaging sensor modules offering multiple viewing channels - colour low light and thermal. The system provides night and day 360° surveillance in short range to enhance Land Situational Awareness. Patented smart low light/thermal fusion allows Driver Vision Enhancement (DVE). Fully digital, PeriSight® enables additional key features such as shared user video stream, electronic stabilization, automatic detection and target tracking.



### **VitelSight®**

Uncooled Thermal Sight for Sniper

This infrared thermal sight enables very accurate and quick engagement at a long range, in night & day conditions. It is equipped with an electronic level and a firing control system which automatically corrects the back-sight according to the environment. It can also equip automatic weapons embarked on a vehicle, vessel and helicopter.



# CBRN THREAT DETECTION

Bertin Instruments offers a complete range of CBRN threat detection solutions.

## **Second Sight® MS**

### Standoff Gas Cloud Detection Camera

Giving real time detection and visualization of the gas cloud, the Second Sight® is easy to deploy and can detect a large range of gas clouds up to 5km away. The infrared imaging capability allows a night & day surveillance with an environment scanning up to 360°.



## **Coriolis® RECON**

### Portable Air Sampler for Airborne Pathogens Detection

Light, robust and easy to deploy, the Coriolis® RECON patented wetted-wall cyclonic technology allows the collection of biological agents (bacteria, spores or virus). It is compatible with any downstream analysis and is operational for long time monitoring of critical areas, in case of suspicious crisis.



## **Environmental Radiation Monitoring Systems**

### From Sensors to Turnkey Solutions

From autonomous gamma monitors (GammaTRACER) in routine use to quick deployment probes (GammaTRACER Spider) in emergency situations, a comprehensive range of sensors has been developed and optimized in order to provide the best environmental radiation monitoring. With 4,000 units in operation covering more than 300 sites worldwide, this radiological network offers all features for life-time autonomous operation.



## **Radiation Portal Monitors**

### Vehicles & Pedestrian Access Control

Designed to perform radiological controls on pedestrian, goods and vehicles (railcars, trucks, boats, etc.), the last generation of Radiation Portal Monitors "SaphyGate" and "DIRAD" operates upon an automatic and dynamic control. With a high-sensitivity plastic scintillator for gamma neutron detection, the system warns the operating agent only in case of alarm or failure.





# CYBER INTELLIGENCE & SECURITY

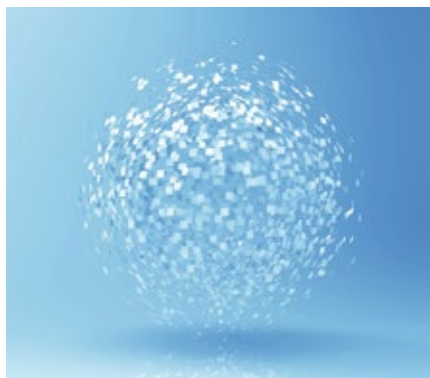
Bertin IT provides in-depth solutions for the defense of sensitive information systems and critical infrastructures base on a high level security solution developed for the french defense, certified at the EAL5+



## **CrossinG®**

Trusted Gateway for sensitive information systems

CrossinG® makes it possible to manage data flows and to ensure the confidentiality and integrity of exchanges between two information systems. High-level network partitioning and advanced processing of incoming and outgoing data flows prevents the risk of an attack spreading from one network to another and also provides protection against harmful content injection and data leaks.



## **MediaCentric®**

Cyber Threat Intelligence platform

MediaCentric® can detect the early signs of cyber attacks and the leak of sensitive information generating vulnerabilities for the IS. MediaCentric®, with capacities for collecting and analyzing the surface and deep web, provides activity monitoring on all sources (social networks, forums, pastes, IRCs, etc.) and alerts.

## **AMI Enterprise Intelligence**

Strategic & Market Intelligence

The AMI Software solutions enables enterprises to exploit all the richness of Big Data and to seize new growth opportunities by taking advantage of the information provided by the Internet.



## **MediaSpeech®**

Multilingual Speech-to-Text Solution

MediaSpeech® allows to transform speech into text, and then index, search and analyse multilingual audio & video sources as well as telecommunications.

## **MobileSpeech®**

Standalone Voice Command

MobileSpeech® is a standalone speech recognition solution for mobile devices and embedded systems that allows easy interaction with the environment.

# CNIM, THE BEST OF TECHNOLOGY AND INDUSTRY FOR MISSION SUCCESS

For many years, CNIM and its subsidiary Bertin Technologies have drawn on leading-edge technologies and manufacturing skills to provide reliable and innovative Defense & Security solutions.

## A key partner for Defense & Security

CNIM is a long-standing partner of French Forces. Tailored to specific requirements with local partners, all our products and equipment are used by many countries.

### Valuable solutions for challenging requirements

Faced to a broadening range of threats and missions, CNIM products support the Forces from land to sea and cyberspace.

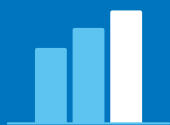


# KEY FIGURES



**2,500**

employees



**540 million €**

revenues in 2016



**55%**

from export



**160 years**

of track record in Defense

**ENIM** and its subsidiary Bertin Technologies,  
a global organization providing tailor made solutions

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