



amesys



SHADOW

**INTELLIGENT JAMMING
SOLUTIONS**

CRITICAL SYSTEMS ARCHITECT



amesys

OUR BUSINESS

Amesys is a French company part of Bull group, leader in high technology critical systems and security since 1979.

Its core business is to supply world class expertise in EW and INTEL systems for military and government agencies, backed by recognized engineering know-how and a proven ability to innovate.

Amesys is setting new standards by introducing its intelligent jamming solution SHADOW.

This unique product range shifts protection and communication jamming efficiency to a level never reached before.

This technology is the result of several years of experience on integration and active jammers countering RC-IED. Amesys has changed the philosophy and concepts of jamming in order to cover all the limitations of existing active high power systems.

SHADOW has been designed for armed forces nations but also for domestic security needs. SHADOW systems are suitable for many operational roles such as :

- "Road side bombs" protection for vehicles (individual or convoy), dismounted personnel and VIP operations.
- Stationing forces or critical area protection.
- Identifying enemy communications and engaging them.
- Explosive Ordnance Disposal (EOD) operations protection.
- Radio communications control.

A BULL GROUP COMPANY

SHADOW

PROTECT

FIND

ATTACK

LISTEN



**An unique and available technology to cover all your needs :
counter RC-IED, communication jamming, communication interception
and direction finding.**

SHADOW product line is submitted to export and sale clearance from the French government.



ONE TECHNOLOGY

SHADOW is an **Intelligent** or **Smart reactive** Jammer, which means :

- it jams only when necessary,
- it guarantees a permanent surveillance of the complete spectrum,
- it jams automatically with an optimized countermeasure and reactivity adapted to the targeted communication,
- it saves power for others potential threats and can engage a large number of communications at a same time for urban use,
- it reduces people exposure to radiation.

This unique technology allows using this platform for several applications with adapted configurations such as dedicated antennas, power amplifiers or specific graphical user interfaces...



PROTECT – Counter RCIED

- Smart reactive jamming (jams only when necessary with an adapted countermeasure)
- Instantaneous detection and identification on the complete frequency band with a Probability Of Intercept of 100%
- Limited people exposure to radiations without decreasing the protection
- Protection perimeter of 100 meters around the BLACK Shadow with more than 2000 countermeasures engaged simultaneously



ATTACK – Offensive jamming

- Directive long distance jamming (more than 1 km)
- Selective attack according to the targeted communication
- Jammer emits only when the targeted communication is active

LISTEN – COMINT

- Instantaneous detection and identification on the complete frequency band
- Very high sensitivity receiver and specially adapted system to Frequency Hopping Spread Spectrum communications
- Demolition and decoding of selected targets
- Recording feature available



FIND – Tactical direction finding

- Instantaneous detection and identification on the complete frequency band
- Direction finding @ 5° RMS
- This Mode can be combined with Listen and Attack modes

INTEGRATION

Mobile installation

Shadow can be installed easily on many types of vehicles for convoy protection or jamming capacity projection.

It is power supplied by power generators or extra alternators added to the vehicles and combined with batteries.

The command/control of the system is done using the remote control on the dashboard during high speed off road driving or with the back seats' workstation. Each installation is fitted with Integrated Built In Test and automatic failure mode management to ensure the mission.

Options can be added such as telescopic mast with high gain directive antennas to extend the range or CCTV features.



Fixed installation

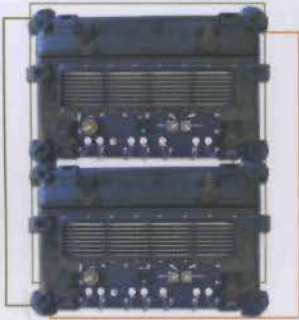
SHADOW can be installed outdoors and indoors to protect a critical facility or area.

A dedicated lightweight structure integrates the cases on trays and the antennas system. The jammer can also be integrated and masked inside buildings for permanent use.

The system is remotely controlled with Ethernet link. It can also be :

- Stand alone or AC connection power supplied
- Connected with additional antennas to extend protection coverage to several rooms
- Networked with other Shadow products to cover large areas.



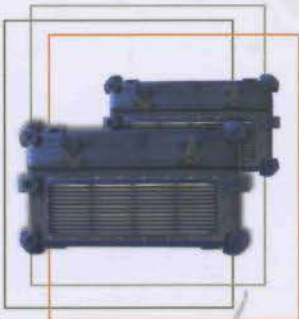


BLACK SHADOW

It is a **smart reactive jammer** covering the frequency band between 20 MHz and 2.5 GHz (Options up to 6 GHz or 18GHz).

It is composed by two ventilated ruggedized cabinets: one for signal interception and generation and one for power amplification.

The Black Shadow targets law enforcement and military applications such as convoy protection, long distance jamming and large area protection.

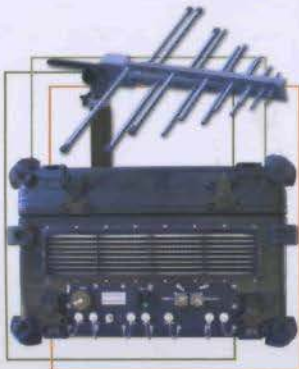


RAID SHADOW

It is a **lightweight smart reactive autonomous jammer** covering the frequency band between 20 MHz and 2.5 GHz (Options up to 6 GHz or 18GHz).

It is a lighter and movable version of the Black Shadow composed by two smaller ruggedized cabinets working on batteries.

The Raid Shadow typical applications are Special Forces missions, mine clearance services (EOD) and small area protection such as check point or temporary area.

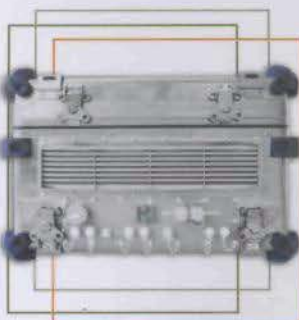


COMJAM SHADOW

It is a **tactical long distance communication jammer** with Alert and Direction Finding features. It is covering the frequency band from 20 MHz to 2.5 GHz (Options up to 6 GHz or 18GHz).

The ComJam Shadow is fitted with a specific hardened remote control to present the tactical situation in real time.

The Black Shadow targets military applications such as convoy protection and tactical offensive jamming.



WHITE SHADOW

It is an **improved active jammer** covering the frequency band between 20 MHz and 2.5 GHz (Options up to 6 GHz or 18GHz).

It is a lighter version of the Black Shadow benefiting from its library of countermeasures. It allows selective and fully programmable jamming adapted to the targeted communications.

The White Shadow typical application is infrastructure and coordination communication jamming.

VISIT OUR WEBSITE :
www.shadow.amesys.fr

SHADOW SERVICES

Amesys provides a full set of dedicated professional services :

- Optimizing vehicles and antennas installation
 - Coverage and positioning study
 - Antenna and radiation diagram study
 - Site and electromagnetic environment survey with specific equipments and simulation tools
 - People safety study
- Vehicles integration
- Fixed installations set-up
- Shadow product range operational and maintenance training
- Civilian telecommunications training
- Networking and meshing Shadow systems
- Managing and using non homogeneous jamming systems fleet



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