



# **Dual Detection Sensors + Wireless Mesh Communication =**

FALSE ALARMS TO NEAR ZERO

GREAT FOR SITES FROM VERY SMALL TO LARGE EASY INSTALLATION

NO INFRASTRUCTURE REQUIRED

USE ON FENCES, DOORS, VEHICLES, MATERIALS AND EQUIPMENT

TOP PERFORMANCE WITHOUT HAVING TO PAY TOP PRICE

## FROM LARGE TO SMALL – HYDRA PROTECTS IT ALL

In the past, only large facilities or high-risk locations could afford cutting edge perimeter protection systems. Our Hydra Wireless Mesh Communication Dual Detection has changed that forever. This intuitive wireless technology delivers the highest level of protection to protect assets and property of any size. Whether you need to secure an entire facility, large equipment or just a single door – Hydra has solutions that can be customized to meet your exact needs. The Hydra Asset Protection System is flexible, scalable, dependable and affordable.

#### **FLEXIBLE**

When we designed Hydra, we knew it would offer many custom solutions to a wide range of markets. But even we underestimated the ways its wireless mesh technology could be used to protect a variety of assets. From a power station perimeter, to a worksite tool shed, to a backhoe – Hydra offers industry-leading protection.

#### SCALABLE

The level of high performance protection offered by Hydra was once only available to large facilities. With Hydra's fit-to-size capability, we can work with you to scale a solution that fits your exact requirements and budget. In most cases your Hydra Asset Protection solution can be installed in a day.

#### DEPENDABLE

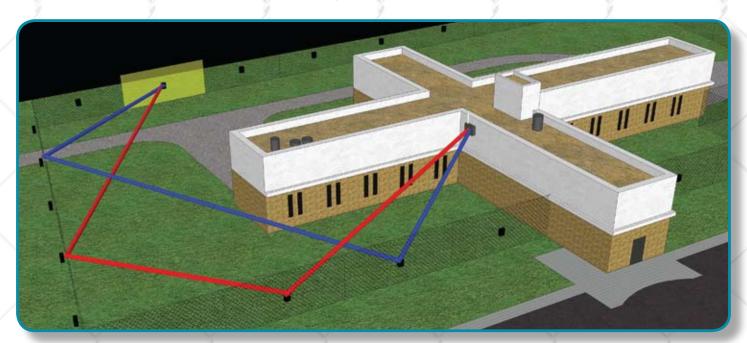
For the very first time, smaller security customers have access to highly reliable asset protection. With two independent sensing technologies in each sensor, Hydra delivers improved detection of intruders with near zero false alarms. The superior reliability of Hydra makes it the first perimeter and asset protection system that can be used in a standard alarm system reporting to a central station.

### AFFORDABLE

Hydra eliminates the infrastructure costs, lowers the cost of installation and has a smaller component cost making it an excellent value for many more customers.

## UNIQUE OPERATION FOR OUTSTANDING PERFORMANCE AND VALUE

We engineered our patented Hydra Asset Protection System using three major system components: Mesh Based Wireless Intelligent Sensors, a Gateway and Alarm Relay Modules. This innovative, yet simple modular design allows it to scale depending on your application and coverage requirements. Smaller sites use one gateway, while larger sites can be covered using remote interconnected gateways.



## WHAT'S THE DIFFERENCE BETWEEN THE HYDRA ASSET PROTECTION AND OTHER PERIMETER SYSTEMS? EVERYTHING!

#### HYDRA

Dual Sensors - A false alarm rate near zero as both the PIR and accelerometer require activation to trigger an alarm.

Hydra's smart sensors make installation on small and lower value sites possible.

Weather disturbances do not cause alarms.

Proximity alarm setting available - notification if anyone is near the fence.

Hydra's sensors attach to gates easily and rattling gates will not trigger a false alarm.

Wireless sensors install quickly and easily without any infrastructure work.

Robust communication protection including automatic frequency hopping, 128 bit encryption and password protection.

Mesh network is self-forming and self-healing. Communication is automatically rerouted if a sensor becomes inoperative. The system provides notification that a sensor is down.

Hydra's wireless sensors can be used on the top of a brick wall and to protect materials, equipment doors and other remote assets.

## **CABLE SYSTEMS**

Any vibration will set off an alarm.

Cable systems require an expensive head-end and installation, not viable for many locations.

Weather conditions cause many false alarms.

Not available.

Cable systems do not work on gates and require expensive microwaves, power and underground conduit.

Cable systems often require power at the fence and are much more labor intensive.

Cable can be cut.

Electronics failure can take out much or all of the system.

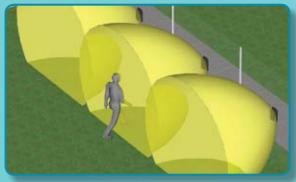
Not available.

## SENSING TECHNOLOGY

Hydra employs a network of sensors to detect intruders using two independent sensing technologies to confirm intrusion activity. To detect the presence of an individual near the fence we use a short-range passive infrared sensor, or PIR. (See Figure A) To detect disturbances, we use an accelerometer. (See Figure B) In dual mode, both sensors have to be activated to cause an alarm. This reduces the false alarm rate to near zero as all wind, weather or objects striking the fence without a human in the PIR detection range are not reported. The superior reliability of Hydra makes it the first perimeter and asset protection system that can be used in a standard alarm system reporting to a central station.

With Hydra, sites can be in populated locations. If one side of the fence has activity, such as pedestrians, the sensor can be placed inward so that someone can disturb the fence on the outside, but until they climb over and activate the PIR, there will be no alarm (see figure C).

If you don't have a fence, the sensor can be placed directly on an asset or a remote door as the sensor can be secured in various ways.



**Figure A** 

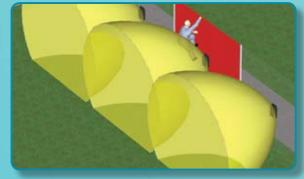


Figure **B** 

## WIRELESS MESH

In our wireless mesh network, individual sensors locally communicate with one another, passing along information until it reaches one of the sensors that communicate to the gateway. This allows for large areas to be covered at long distances from the central gateway. Unlike point to point wireless communication links, mesh networks build multiple redundant paths to maintain robust network communication.



**Figure C** 

#### **INSTALLATION**

The Hydra Asset Protection System is easy to install. Since the wireless mesh network eliminates the need for costly infrastructure associated with perimeter systems, the installation time and cost is a fraction of what cable based systems require. What used to take weeks can now be done in a day.



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