



Characteristics of Virtuefence system.

- * *Electro optical system working in the infrared and invisible area of the spectrum*
- * *One side operation with nothing on the far end and operation up to 300-500 meter*
- * *One side electronics and reflex on far side and operation to 5000 meter in range*
- * *Very exact detection line admits full control of where to detect*
- * *Really virtual invisible fence performance will give intruders problems to penetrate*
- * *Battery operation options and discrete camouflages makes the system flexible*
- * *Low life cycle costs and low demands in maintenance*
- * *Wire less options and remote control*
- * *Integrated cameras tells operator what caused the alarm*

Virtuefence system the electro optical barrier system

Laseroptronix offers the Virtuefence virtual barrier system baser on laser technology and electro optical sensing technology. Virtuefence is an active laser based system with the electro optical unit at one end and a passive reflex at the other end. The laser barrier is invisible for the eye and fully virtual. When objects cut the fence barrier line the laser beam sense the difference in signal and an alarm is activated. The narrow laser beam admits an exact line where the virtual plane is located and over long distances all objects cutting the border line will be detected. The range can be over 4500- 5000 meter and humans crossing the line will be detected. We offer several models with different characteristics depending on demands of the application.

Many of our products are protected by patents and patent applications

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Virtuefence *Virtual fence and barrier system*

Virtuefence is cost efficient and easy to operate and needs very little maintenance and service. Virtuefence is in visible and hard to detect which makes virtual barriers really virtual.

Limits exists in all solutions and Virtuefence is no exception. Main problem is bad weather like heavy rain, snow and dense fog. If eyes can see you can normally measure which is the general rule. This limitation has to be considered. One way to go around this problem is a long wave system which penetrates the bad weather and we will soon offer this solution.

This system is unique in its simplicity and flexibility and opens the door for new thinking in security and fence designs.

Virtuefence is made in 2 designs.

One is a one side system with no need for any equipment at far end. Here we set the distance where the system shall stop to protect and after that point it do not give any alarms. This makes it possible to fence over water areas and to protect sea sides with exact precision. This system gives the largest flexibility. This system can make safe detection of man sized objects up to 300- 500 meter in distance.

The other have a reflex or electronic box at far end opposite the transmitter. This design admits a far better range. We can get ranges up to 5000 meter for detecting intrusions of the barrier. The main problem with the long ranges is the flatness of the checked area and to reduce this problem we offers an array based system which admits better detection in corrugated areas of the landscape.

Some of the systems do give a distance to the detected incident. This makes it possible to locate the intruder to a map position with a few meter in accuracy.

The extreme precision of a laser beam makes it possible to eliminate specific areas and to discriminate away the area just over the ground where small animals can make problems in false alarms.

Cameras is a good option for the system. When there are alarms it is of high value to know what caused the alarm and what the threat is. Did you detect a bird or an armed intruder ? This output makes the correct decision possible how to react and handle the future threats.

Virtue fence can be connected by a cable or wire less operated. Normally all functions are designed to be fail safe.

The concept of Virtuefence

The demand in better security for large areas in combination with reduced costs and less stress for the staff has demanded new solutions and new thinking for a long time. Increase in terrorist acts and criminality do also demand more safety. The demands in 100% safety and fail safe functions is now a must and not a dream.

Demands in reduced costs and better life cycle cost calculations has demanded new products.

Our thinking has created new products where Virtuefence is one of them. Virtuefence is designed as a piece in larger scale safety and networks where Laseroptronix is interested to be your partner.

This is a security system and our policy is not to give all details about operation and functions as this information is only available for some key persons.

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