

What is Smart Defense?

Smart defense is a fully developed concept based on the fact that crime rises with temperatures, in detail: bad weather is the best crime deterrent. Unfortunately weather is unpredictable to be available at the right time and at the right spot but nothing is easier than creating similar conditions on demand and when needed most as a crime deterrent.

We basically use water, at the right time and in the right angle to confuse and deter criminals of all trades. To make it worse, water can be hot or cold to enhance the impact and it can be mixed with stain, smell or colors, pepper or other ingredients depending on the application.

Water can be shot from an automated valve or pumped from a container, which then would enable for mobile applications and other liquids of choice. And it works not only to irritate criminals or disperse crowds, as a side effect it can also distinguish fire. The combination of triggers is as endless as the individual applications, from gate or door control in case of robberies or hijackings to secure cashiers from getting robbed or entire shops for prevention of looting.

The concept proves itself through thousands of mobile water cannons used around the world by police in order to disperse crowds and to restore calm and public order.

What alternatives are available and what are the advantages and disadvantages?

Pepper Gas is available in different sized pressurized canisters and easy to install; systems are only applicable for indoor use and to prevent petty crimes like burglaries and theft. Disadvantage is limited capacity of canister content and the fact that rooms need to be decontaminated after activation and a pretty good change of self harming.

Smoke Screens or fog machines fall into the same category, have also limited capacity and impact to criminals but without the disadvantage of decontamination or self harming after activation.

The Roteck Smart Defense automated water cannons are available for indoor and outdoor applications and offer a variety of liquids or mixtures to choose from. Our water cannons can operate almost unlimited from a water tap and have an inconvenient direct impact without intention to harm. Alternatively we also have a semi mobile version available, operating with all non corrosive liquids or mixtures hereof and pumped from a container into the system. Most important is the matching trigger application. Since we are not focused on petty crimes but trying hard to prevent aggravated and violent to life threatening crime instead, we have developed our own and unique trigger methods to assist our systems to ensure best performance when needed most.

There are only few case studies around questioning the correlation between crime and weather in general but simple logic applied, who wants to be outdoors in rain, and as a criminal, leaving unnecessary traces behind?

<https://businesstech.co.za/news/lifestyle/263933/when-temperatures-rise-so-do-crime-rates-in-south-africa/>



Our **Smart Defense Unit** might be not as powerful as commercial water cannons used by law enforcement authorities but operate with the same efficiency from a fixed location. Depending on application we trigger the unit automatically with our **follower control** at gates and garage doors, or with our radio **impact panic button** for all indoor applications and on point.

Smart Defense unit SD1 for indoor applications, preset by an impact panic button for 3 minutes and activated by a build in PIR motion detector. Many units can be preset simultaneously; final activation is individually triggered by a motion detector. Requires tap connection and 12 VDC / 0.5A power.



Smart Defense unit SD1F for outdoor applications. Preset with the first pulse from FollowerControl and activated by a second FC pulse within the time frame or manually by a panic button. Requires tap connection and 12 VDC / 0.5A power, which can be supplied from a gate or garage door motor.

Both units are also available as SD2 / SD2F with a separate refillable liquid container, DC pump and different nozzle setup. SD2 requires 12 VDC / 5.0 A power (in action only), which can be supplied from a gate or garage door motor.