
Surveon Smart HDR Technology Introduction
Application Notes



Technical Support Team

Abstract

The HDR and the WDR cameras are common solutions for the advanced security projects to provide good image quality even in strong backlit situations. However, keep cameras under the HDR mode may have some disadvantages, such as low light quality, insufficient color and so on. Surveon smart HDR solution detects the ambient lighting automatically so that the camera can provide good quality under any lighting condition without any human intervention.

HDR overview

From the right image with the HDR-On, we can see the details of the trunk, compared to the left image with the HDR-Off.

HDR-Off (Wide Dynamic Range)



HDR-On (Wide Dynamic Range)



The true WDR or HDR is designed for wide dynamic range scenes; it may not produce great image quality in the standard lighting environments. Examples are provided below.

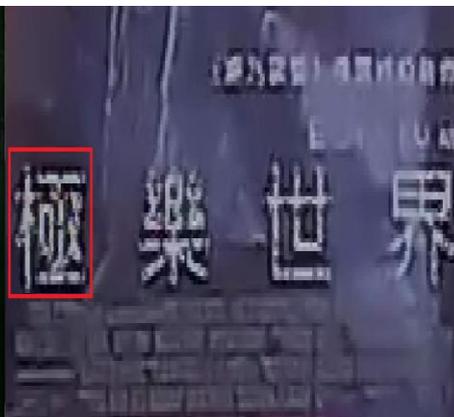
HDR-On in low light situations

HDR-on would produce more noises in low light situations.

HDR-Off (Low light)



HDR-On (Low light)



HDR-On in well-lit situations

HDR-on would cause color cast in a well-lit environment.

HDR-Off (Well-lit)



HDR-On (Well-lit)



Summary

From the examples above, we can see that with the HDR-On, it may also impact the images under standard lighting conditions. Thus Surveon introduces the Auto-HDR feature to enable/disable the HDR according to the lightings (dB value).

Surveon Smart HDR Solutions

In a wide dynamic range situation, Surveon camera will enable HDR functionality automatically. In the well-lit or low light environment, Surveon cameras will turn off HDR automatically. Users do not need to worry about the lighting conditions and image quality, since Surveon cameras can detect the lightings and adjust the cameras accordingly to produce the best image quality.

**Auto HDR-Off
(Well-lit)**



**Auto HDR-Off
(Low light)**



**Auto HDR-On
(Wide Dynamic Range)**



Surveon Cameras with Auto HDR

Surveon's Auto HDR is the real technology dealing wide variety of LUX ranges; users can experience this technology from Surveon cameras below.

CAM2441



CAM3471



CAM4471

