

# BLACK PEARL RED

Intensive Pixel Technology by SK hynix

Hi-0521 QHD (5Mp) Black Pearl Security  
CMOS Image Sensor

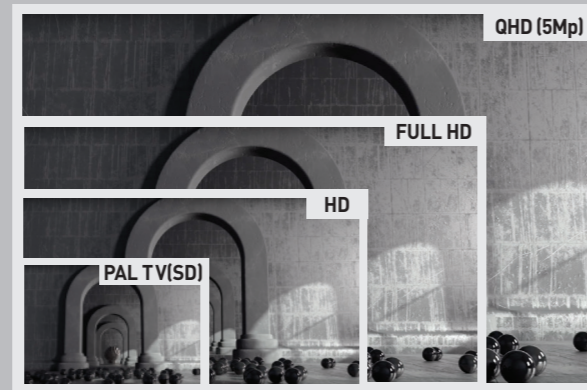


BLACK PEARL  
RED

## QHD (5Mp) Resolution

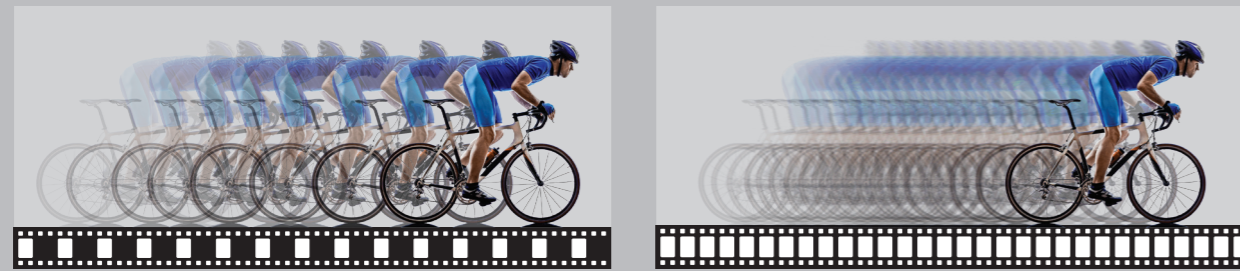
2.0µm Pixel 1/2.8"

QHD (5Mp)	2,560H x 1,944V
FHD	1,920H x 1,080V
HD	1,280H x 720V



## High Frame Rate

For Video and Moving Detection



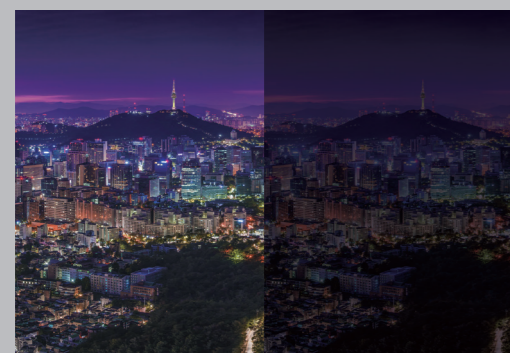
Low Frame Rate (24 fps)

High Frame Rate (60 fps)

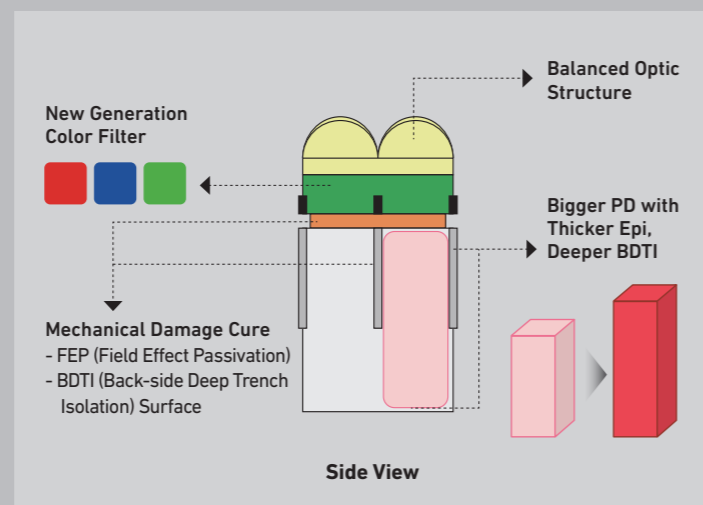
QHD 1944p	@ 60fps
FHD 1080p	@ 60fps
HD 720p	@ 120fps

## Low Light Vision

BSI and B-DTI technologies



Dynamic Range	76dB
Sensitivity	12,000 e-/lux·sec



## Hi-0521

QHD High Speed Solution for Security and IP Camera Applications

Features	Hi-0521
Resolution	5 Mega pixels (2,592H x 1,944V)
Optical format	1/2.8"
Pixel size	2.0µm BSI (with Deep Trench Isolation)
Frame rate	60fps @ QHD 1944p 60fps @ FHD 1080p 120fps @ HD 720p
Interface	MIPI 2-Lane (1.6Gbps/Lane)
Power Supply	Analog: 2.8V (Typical) Digital Core: 1.1V (Typical) I/O: 1.8V/2.8V (Typical)
Input Clock Frequency	10~27MHz
Dynamic Range	76dB
Sensitivity	12,000 e-/lux·sec

## Functional Block Diagram

