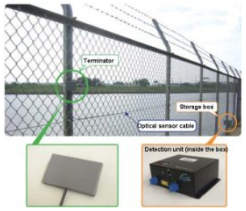
Empowered by Innovation NEC

High Sensitivity Camera

NEC Corporation

1. NEC Surveillance System Solution Components



Sensor

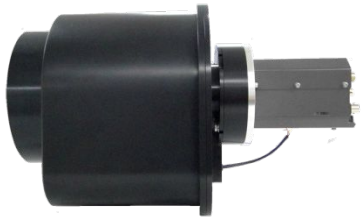
Microwave Link

Codec

Recording Server

Monitoring Control System

NEW HSC



Normal CCTV Camera

Legacy High Sensitivity Camera

NEC Super High Sensitivity Camera

Infrared Thermal Camera

Illumination (lx)

10 | 1 | 0.1 | 0.01 | 0.001 | 0.0001 | 0.00001

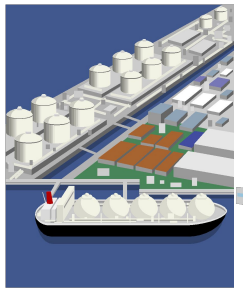
Bright

Dark

2. The 24 hour wide area video surveillance solution

Railroad

Port / Harbor



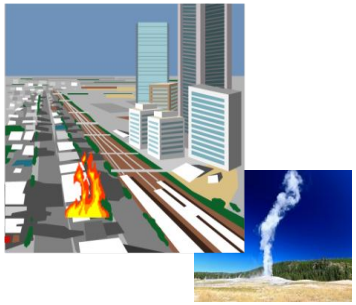
Broadcasting station

Airport

Natural disaster

an early find of tsunami, a flood etc.

Disaster prevention



an early find of accidents or volcano activity

High Sensitivity Camera

Take a clearer shooting all day and all night

Ecological observation

Facilities

watching of suspicious behavior or unusual situation

Astronomical observation

3-1. Detail of features 1/2

High sensitivity

- Newly developed full HD CMOS sensor
- NEC original signal processing technology realizes shooting with low noise, high resolution, and excellent color reproduction, all day and night.

Visibility improvement technology (developed by NEC)

- "**De-noise**" function improves S/N ratio when shooting dark place
- "**De-haze**" mode keeps better visibility even under foggy condition

3-2. Detail of features 2/2

Auto Sensitivity Control (ASC) & Full-Auto White balance (FAW)

- ASC controls not only IRIS and Master Gain but also Pixel Addition, Charge Storage Time (Exposure Time), Electronic Shutter and ND filter to obtain best images even in any situation (all day and all night).

NC-H1200/NC-H1200iR
(Box type)

Extended High Sensing Mode

- Generally speaking, image sensors must have spectral sensitivity to near-infrared rays, and cameras have an optical filter cut those rays in front of the sensor to get images with proper color balance. NC-H1200iR and NC-H1200P has IR-PASS mode that applies a filter deliver near-infrared rays to the sensors to achieve further high sensitivity.

Digital Zoom

- As a zoom lens is turned toward the telephoto end, the the amount of incident light decreases (F-drop or ramping). Digital Zoom can realize zooming operation without F-drop.

NC-H1200P

4. Snap shot by NC-H1200

Shooting image at night

NC-H1200

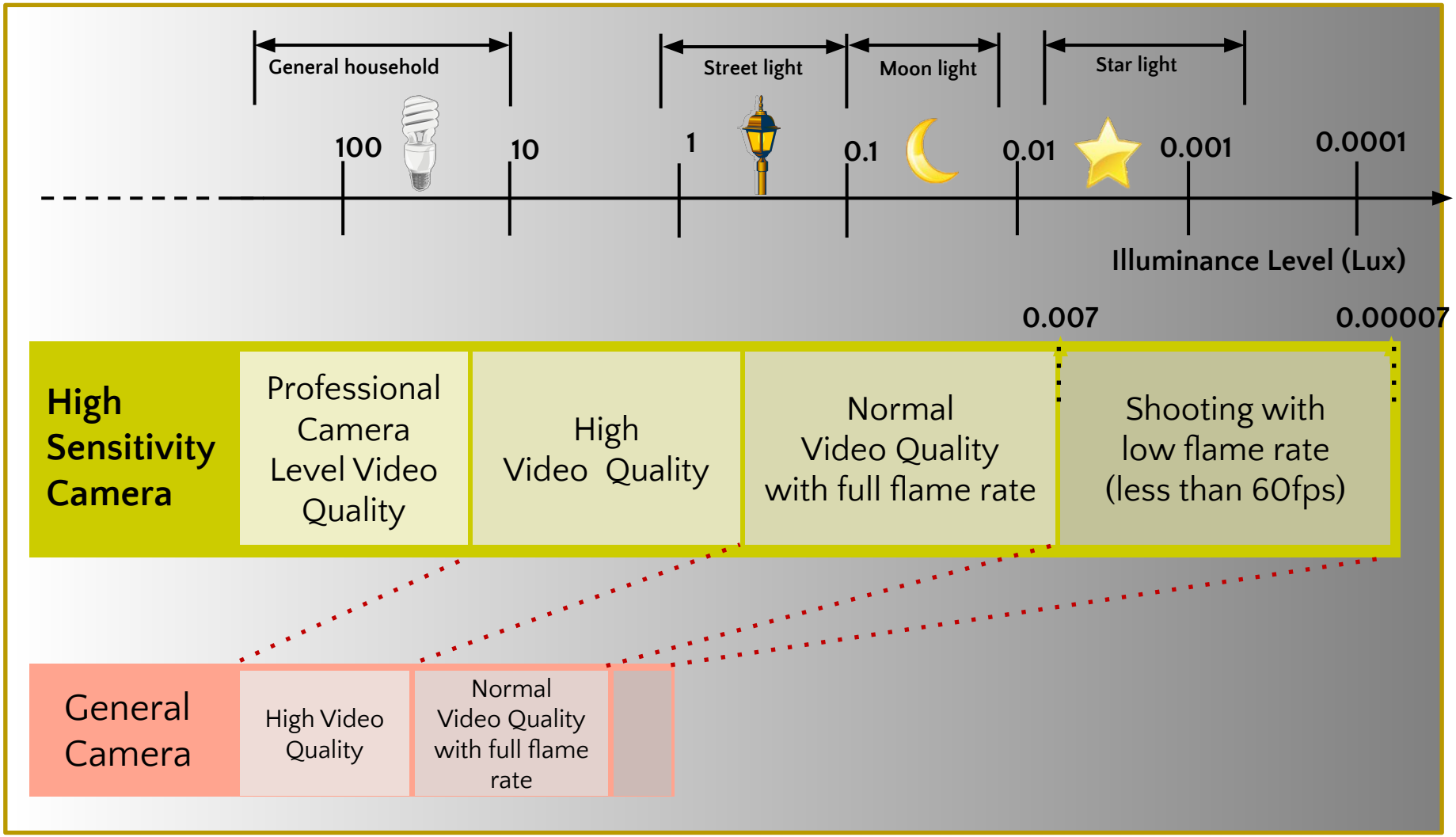
another firm's Camera

Effect of De-haze function

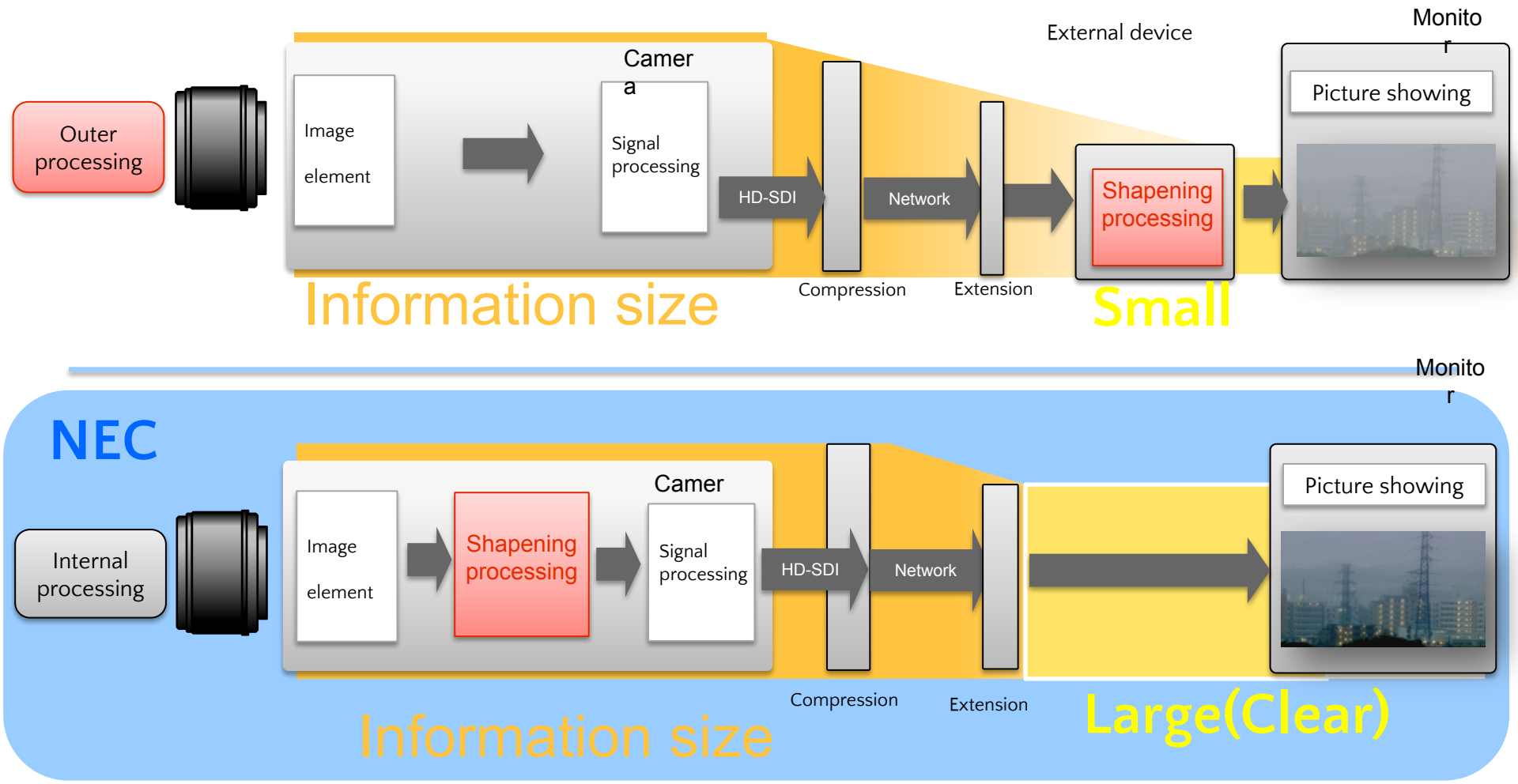
ON

OFF

5. Illuminance Video Quality Comparison



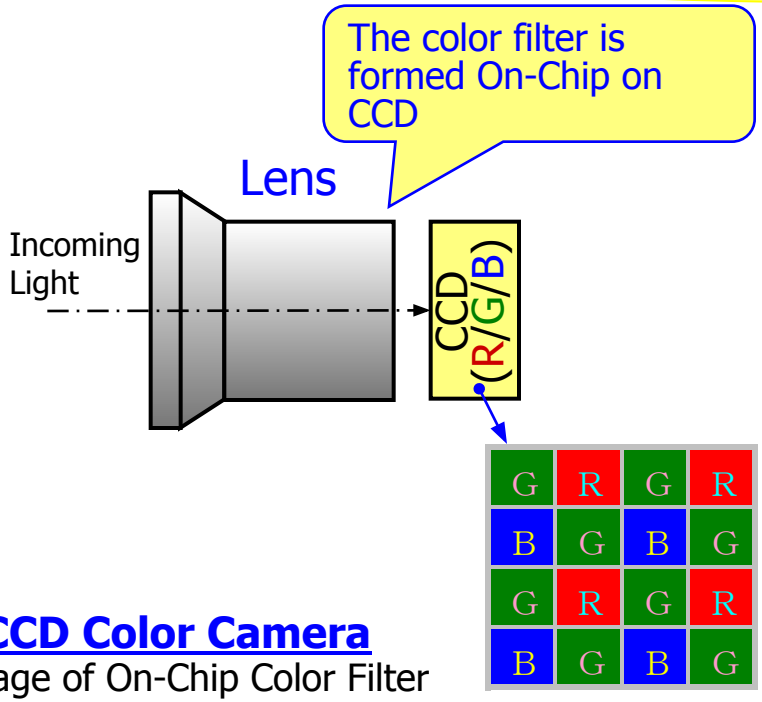
6. The advantage of built-in image sharpening processing



7. Full HD 3 CMOS vs Legacy CCD Camera

a) 1-CCD Color Camera: Incoming Light is separated in color at On-Chip Color Filter formed on CCD Chip

b) 3-Full HD CMOS Color Camera: Incoming Light is separated in color at Prism located before CMOS (more color information than 1-CCD)



a)1CCD Color Camera

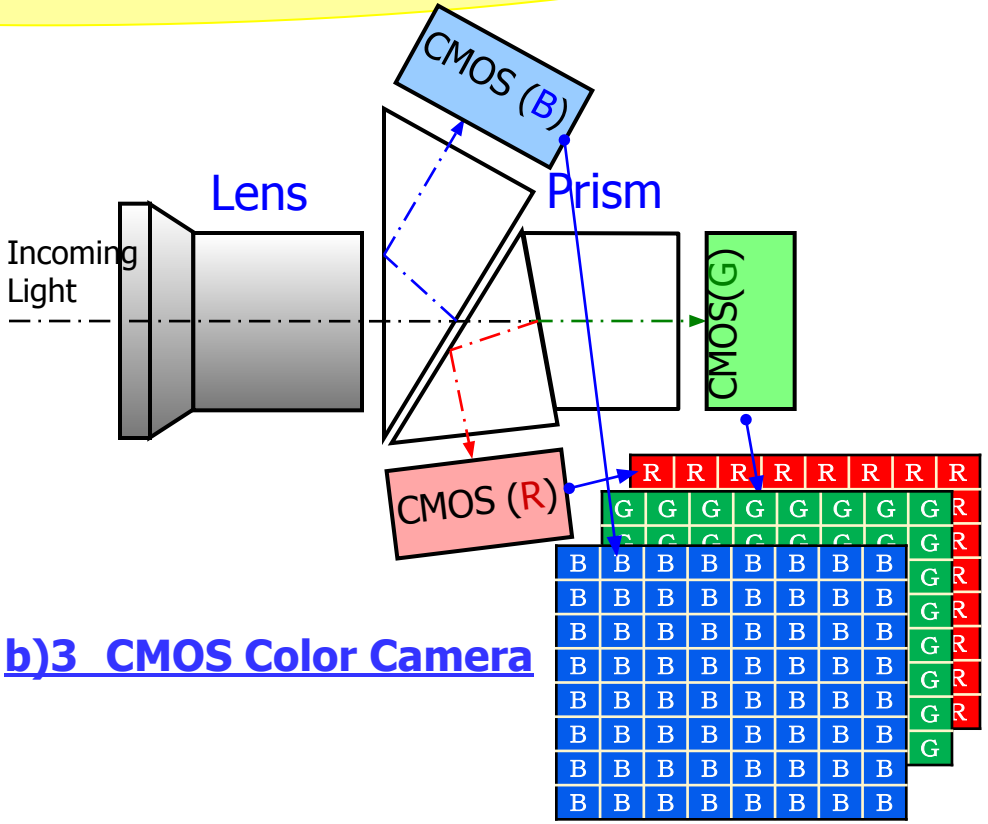
Image of On-Chip Color Filter

(In case of Bayer Sequence Primary Color Filter)

Image pixels 658(H)×496(V) for all Color

Effectively :329(H)×248 (V)for Green

329(H)×128(V)for Red or Blue



b)3 CMOS Color Camera

Image pixels 1920(H)×1080(V) for Each Color

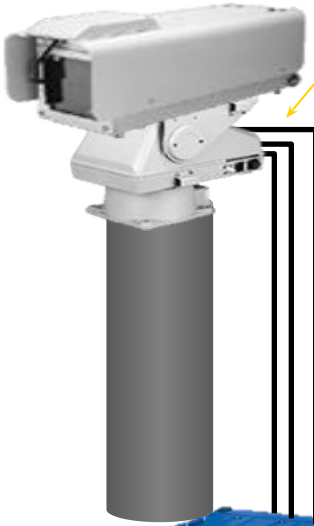
8. Basic Idea for remote monitoring system

On Site Equipment

High Sensitivity Camera

Camera Housing

Camera Cable Kit
Video, Control and Power



Microwave Link
iPaso-link

Cat5 Lan Cable

Tripod

AC

Interface equipment box
（IP Encoder, 230V to 100V step down etc)

Microwave Link
iPaso-link

Mounting on roof top antenna pole

Cat5 Lan Cable

Monitoring room Equipment

Poe Hub

IP Decoder

LCD Monitor

PTZ Remote
Control unit

HDD Digital Recorder

Step down transformer

8. NC-H1200 series Line-up

NC-H1200/NC-H1200iR Box Type

Zoom Lens
can be selected based on the demands

General Spec.
Dimensions
90mm (W) x 103 mm (H) x 161mm (D)
Weight
Approx. 1.3 kg

NC-H1200P Camcorder Type

Zoom Lens
can be selected based on the demands

Equipped Function
View finder, Recording unit and Shoulder pad

General Spec.
Dimensions
130mm (W) x 238 mm (H) x 258mm (D)
Weight
Approx. 5.5 kg (Body and View Finder)

NT-S370 X25 PTZ type*

Zoom Lens
Zoom Ratio 25 times
Focal Length 9.6～240mm
Field of View 9.6mm 53.1° ×31.4°
240mm 2.29° ×1.29°

Pan Tilt Head
Pan & Tilt Range Horizontal : 360 ° endless
Vertical : +20° ～-70°
Pan speed 180° /s(max)
Tilt speed 90° /s(max)

General Spec.
Dimensions 314 (W)×444(H)×495(D)mm
Weight Approx. 23kg

* To be prepared

* A stand-alone camera can be combined with general pan & tilt head and camera housing products.

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