# FUJINON

# Fujinon 360° panomorph lenses

ImmerVision Enables®

milestone
The Open Platform Company
XProtect® Enterprise 8

HD 2MP

FUJINON
YF350A-SA2
PANOMORPH
1/3" C-Mount
#01020042

360°

# FUJIFILM
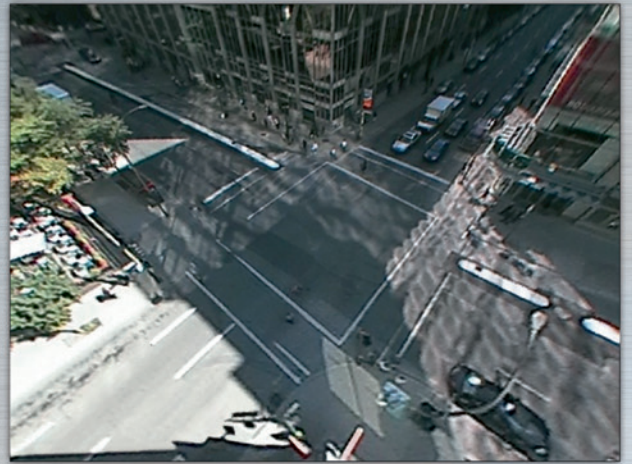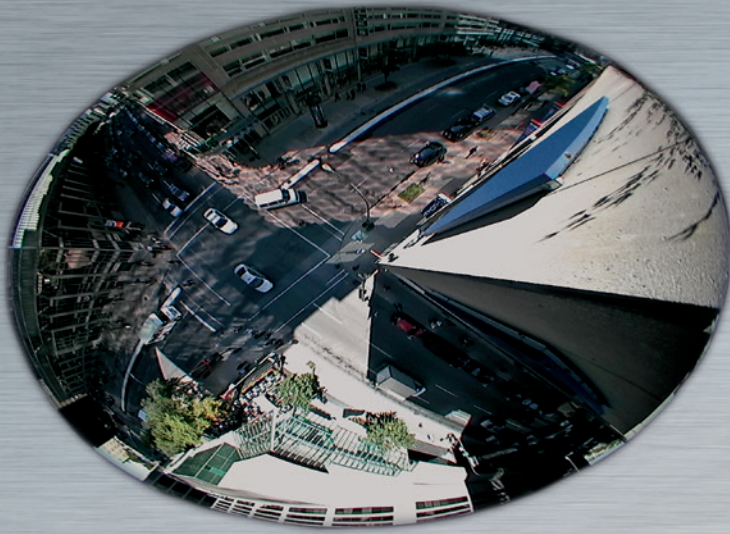
# Keep the overview

## The 360° panomorph lenses from Fujinon



Fujinon is your source for the most advanced 360° video lenses. Optimised for video surveillance, Fujinon panomorph lenses enable a full 360° blind spot free view and get the most performance from your analogue, IP or Megapixel camera.

Fujinon. To see more is to know more.
www.fujinon.de

**Key benefits:**

▶ **Eliminates blind spots:** with a panomorph 360° image you miss nothing – see everything, anywhere at anytime

▶ **Increased situational awareness:** provides complete coverage of an area viewed to let you immediately spot threats, detect suspicious movement, find objects left behind and track any individiuals on your premises

▶ **Recorded in 360° panoramic view:** allows you to examine the complete 360° in a recorded event with no breaks in coverage and no lost moments

▶ **Enhance the performance of existing surveillance systems:** 360° viewing increases the surveillance coverage as a complement to your fix and PTZ viewing capabilities

▶ **No need to replace existing cameras:** Fujinon panomorph lenses are compatible with a wide range of cameras (see lens model specification for camera compatibility)

▶ **Access to 360° immersive viewing:** panomorph lens technology is currently supported by most major Video Management Software (VMS) solutions on the market.

## Immersive viewing

The combination of ImmerVision Enables® panomorph lens, software and compatible CCTV camera offers a flexible usage of 360° immersive view. By using ImmerVision Enables DVRs, NVRs and the VMS you are able to navigate without distortion inside the image like a digital PTZ. Image correction (dewarping) is possible both live and playback.

Each ImmerVision Enables software solution can offer various image display possibilities such as:

Single View                    Multiple Independent Views                    Perimeter View

## Technology

Panomorph out-performs other 360° technologies such as Fish-Eye or catadioptric/mirror lenses. The unique elliptical image produced by panomorph lenses allows using a larger number of the sensor pixels and the increased distortion in the periphery results in a superior picture even on lower resolution cameras. This means that a panomorph lens requires fewer pixels on its sensor to produce the same resolution compared to other 360° optics.

The panomorph lens is characterised by unique features:

▶ More pixels coverage on camera sensors compared to Fish-Eye lenses
▶ Object size magnification in area of interest (periphery) compared to Fish-Eye lenses
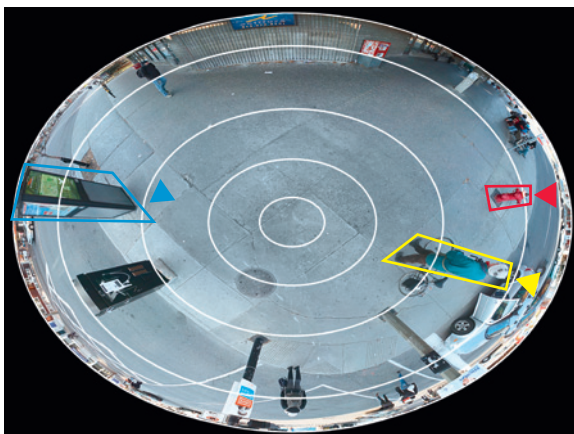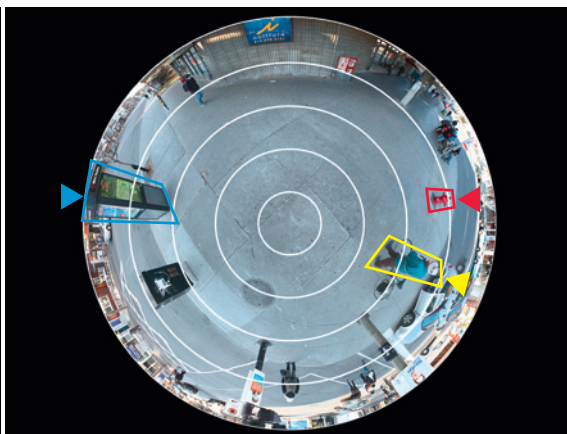
panomorph lens                                             Fish-Eye lens

| ▶ Blue Area | 27950 pixels (+35%) | ▶ Blue Area | 20696 pixels |
| ▶ Red Area | 4550 pixels (+119%) | ▶ Red Area | 2077 pixels |
| ▶ Yellow Area | 18846 pixels (+101%) | ▶ Yellow Area | 9340 pixels |

Panomorph vs. Fish-Eye comparison using a 1.2 Megapixel camera

# Application Sites:

Banks, Airports, Education, Casinos, Retail, Ports, Transportation, Prisons, Oil & Gas, Public Buildings, Hospitals, Utilities, Government, Critical Infrastructures … and many more.



For example, Fujinon panomorph is the perfect solution for retail stores. The bird's eye view of your store lets you observe and record the entire space, every corner, every floor display and every area where transactions are occurring.

Fujinon panomorph for transportation solutions: gives an overview of the facility, lets you observe and record the entire space, every corner, every ticketing area, every platform, every baggage claim area and airline gate.

## Technical data

| Format | Product | | Focal length in mm | Iris range | Angle of view (HxV) | M.O.D. in m | Mount | Weight in g |
|--------|---------|--|--------------------|-----------|---------------------|-------------|-------|-------------|
| **360° panomorph lenses** | | | | | | | | |
| High resolution for 2 Megapixel, ImmerVision Enables | | | | | | | | |
| 1/3" | YF360A-2*[1] | HD 2MP / ImmerVision Enables | 0.9 (short axis) 1.15 (long axis) | F1.9 (short axis) F2.4 (long axis) | 182° x 182° | 20 | CS | 180 |
| | YF360A-SA2*[2] | HD 2MP / ImmerVision Enables | 0.9 (short axis) 1.15 (long axis) | F1.9 (short axis) F2.4 (long axis) | 182° x 182° | 20 | CS | 180 |

*[1] no iris (open)
*[2] auto iris (DC), cable length 260 mm