

# POWerview 25MP-72 CAMERA

THE LATEST IN HIGH-RESOLUTION PIV  
IMAGING FOR LARGE FIELDS OF VIEW  
AND VOLUME SIZE WITH UNSURPASSED  
RESOLUTION AND SPEED

TSI PowerView™ 25MP-72 Camera is a multi-bit, 25-megapixel, digital CMOS camera designed exclusively for global flow measurements. It offers 5120 x 5120 pixel resolution with a pixel size of 4.5 μm × 4.5 μm, operates at 72 frames per second at full resolution and provides a selectable 8-bit, 10-bit output. With an extremely low noise level and high signal quality, it can image large flow fields with superior spatial resolution. The 25MP camera incorporates a built-in microlens array, making it ideally suited for imaging laser-illuminated flows.



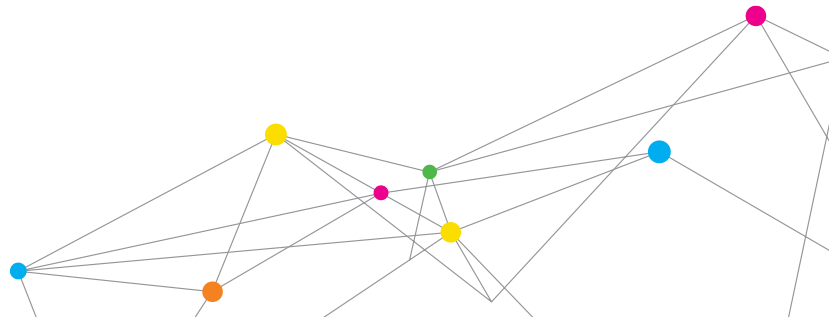
Thanks to high signal quality and low noise, this latest-generation camera is ideal for global flow measurements using PIV. The high pixel resolution of the 25 M pixel makes the camera ideal for large fields of view, for both planar PIV and volumetric PIV. Other features, such as short frame straddling times and high quantum efficiency, make it appropriate for a wide variety of applications ranging from hypersonic to creeping flows. Capture rates of the camera can be increased by using Region of Interest (ROI) capture. The 25MP-72 camera is fitted with an F-mount lens mount and comes standard with a Nikon® 50-mm lens, camera interface and all interface cables.

## Applications

- + Liquid and air flows in large facilities
- + Time-resolved liquid flow measurements evolution of flow structures
- + Micro channel flows using micro PIV
- + Planar and volumetric PIV using multiple cameras



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# SPECIFICATIONS

## POWerview 25MP-72 MEGAPIXEL CAMERA

The camera is supported by the latest and industrial standard CoaXPress frame grabber, which offers high data throughput to ensure all images can be transferred without any interference. Multiple camera arrangements can be supported by a simple frame grabber.

Description	Specifications
Image Device	Global Shutter CMOS with Microlens
Pixel Resolution	5120 x 5120
Pixel Size	4.5 $\mu\text{m}$ x 4.5 $\mu\text{m}$
Sensor Size (Diagonal)	35 mm
Intensity Dynamic Range	8-bit, 10-bit selectable
Frame Rate	72 fps (200 fps at 9MP)
Quantum Efficiency	55% (532 nm)
Read Noise	0~64 LSB at 10 bit
Video Gain	x1 ~ x4
Lens Mount	Nikon F-Mount
Camera Interface	4-Cable CoaXPress
Standard Camera lens	Nikon 50 mm F1.8 Lens

Specifications are subject to change without notice.  
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