



Real RGB Real Resolution Real Zeutschel



Zeutschel CAM

New Zeutschel Camera – Precision unlocked, Resolution redefined!

In the world of professional digitisation, every detail matters. With the new Zeutschel cameras offering One shot and Pixelshift capture, it is possible to gain unmatched clarity, fidelity and detail level for archival, heritage and high-end imaging applications. These are not just cameras — they are precision imaging systems designed, based on our more than 60 years experience in building cameras for cultural heritage applications and its digitisation, to set new bench-marks in image quality and workflow efficiency.

A New Era of Color Accuracy and Resolution

Zeutschel's new X/Y Pixel-Shift Camera System redefines precision imaging. With true sub-pixel precise movement in both X and Y axes, every single pixel captures real RGB data detecting instead of guessing.

The result: full-color fidelity, moiré-free images - unprecedented detail level in addition for archival and cultural-heritage digitisation.

Pixel-Shift Technology — from 1 to 16 Shots

- 1-Shot: fast, high-quality single capture for production scanning.
- 4-Shot Mode: colour-true RGB capture with real RGB detection and clear images.
- 16-Shot Mode: the pinnacle of detail — ultrahigh- resolution output up to 600 MP on 150 MP backs or almost 1 GigaPixel (988 MP) on Zeutschel 250 MP (246 MP usable) backs.

Image registration happens on the fly, ensuring full workflow speed and consistency.

“Jailbreaking” the Phase One IQ4

Zeutschel's engineering team has achieved what others considered impossible: The Phase One IQ4 150 back can now be repurposed when mounted on the new Zeutschel X/Y system — enabling true pixel-shift and full-color RGB detection.

This turns existing IQ4 camera backs into 600 MP, fully calibrated capture devices integrated with our OmniScan accurately.

Ultra-High-Resolution Optics

Dedicated super-high-resolution reprographic lenses ensure that every pixel is transmitted cleanly and accurately.

Full Calibration and Workflow Control under OmniScan

The “One Click Calibration” precisely adjusts the acquired sampling rate, exposure, gain, and white balance to the specific capture conditions. It also includes “shading” correction, also known as flat-fielding. A dedicated lens calibration for distortion removal is also part of the workflow. Furthermore, additional scene-referred calibration functions are available. These include ICC camera RAW profiling for color-accurate output, OECF calibration, pixel shift calibration and automatic dead-pixel detection and correction.

This creates an ISO-calibrated, scene-referred workflow — delivering precise images that meet or exceed FADGI, Metamorfoze and ISO 19264-1 standards.

Technical Data

Supported medium format camera backs

Zeutschel 151MP
(Sony IMX411, 14192x10640
Pixel 3,81µm)
Zeutschel 245MP
(Sony IMX811, 19200x12800
Pixel 2,7µm)

PhaseOne IQ4 150
(14204x10652 Pixel 3,76µm)

Capture Mode

One, 4- and 16-shot electronic shutter

Lens Range

Variety of ultra-high resolution repro lenses

Focus travel in mm

60

Focus travel accuracy in µm

0,5

Pixelshift mechanism

Ultra precision piezo drives

Active cooling

Yes, optional on Zeutschel digital backs

Lens connection

Reliable bayonette connection

Positioning range (X/Y in µm)

14

Surface accuracy (Z in µm)

0,5

Payload capacity (kg)

0,5

Live Image

Yes

Autofocus

Yes, based on live image

Dead Pixel

Dead pixel detection and correction

Type

X/Y pixel shift camera

Get in touch



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