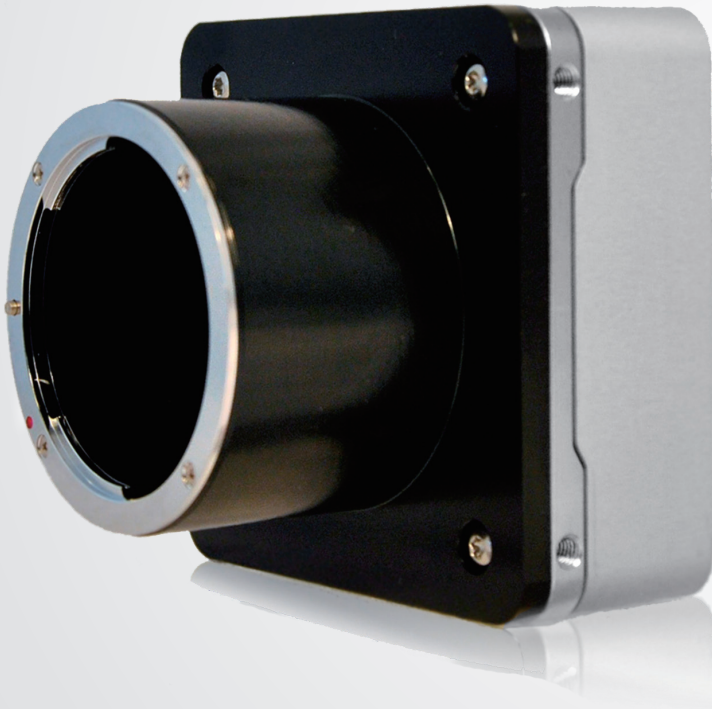


# SAPPHIRE series

## S-25A70

**Adimec**  
*Excellence in Imaging*



Adimec offers the Sapphire S-25A70 CXP camera in a low power compact outline design, not requiring forced cooling through a fan. The Sapphire is based on Adimec's new second generation CoaXPress V1.1.1 compliant 25 Gb/s CoaXPress Quad interface. This interface is also fully backward compatible with existing V1.0 frame grabbers.

**CoaXPress**<sup>®</sup>

### Target



25 Megapixel Resolution at 72 fps



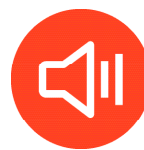
True Global Shutter CMOS



CoaXPress V1.1.1 compliant



No forced cooling required



Low noise performance



OnSemi VITA25k sensor

# 25 Megapixel High Resolution Metrology Camera

## Specifications

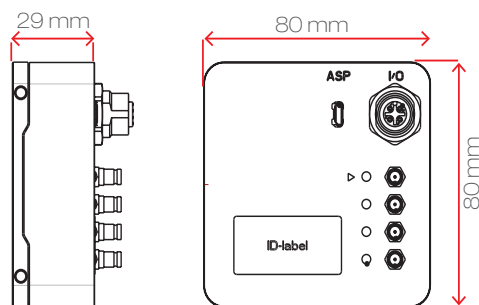
|                               |   |
|-------------------------------|---|
| Sensor                        | Vita25k CMOS  |
| Pixel size                    | 4.5 $\mu\text{m}$ x 4.5 $\mu\text{m}$ with micro lenses       |
| Resolution                    | 5120 (H) x 5120 (V)   |
| Optical sensor size           | 35 mm   |
| Video Output                  | CoaXPress - V1.1.1/ V1.0 CXP3 or CXP6 2, 4 lanes configurable |
| Max frame rate (8bit 4x CXP6) | 72+ fps   |
| Dynamic range                 | 56 dB linear  |
| Full Well*                    | 22ke- (max)   |
| Electronic shutter            | Global shutter 5T (PLS <1/700)                                |
| Image acquisition             | Continuous / Controlled                                       |
| Output resolution             | 8 / 10 Bit  |
| Monochrome / Color            | Monochrome / Color  |
| Power input                   | 24 Vdc PoCXP  |
| Power usage                   | < 8.5 W   |
| Operating temperature         | -10°C to +30°C or max housing temp +50°C                      |
| Reliability                   | MTBF > 75,000 h @ 30°C  |
| Weight                        | < 400 g excluding lens mount                                  |
| Lens mount                    | F-mount (Optional: TFL-II, M42, T2 or EF)                     |
| Compliance                    | CE, ROHS  |

\* specification OnSemi

## Functionality

|                                       |   |   |
|---------------------------------------|---|---|
| Defect pixel correction               | √ | √ |
| Manual white balance                  | - | √ |
| One push AWB                          | - | √ |
| ROI (single, multi band-WOI)          | √ | √ |
| Frame counter                         | √ | √ |
| LUT                                   | √ | √ |
| Digital fine gain (1x to 32x)         | √ | √ |
| Automatic black level control         | √ | √ |
| PRNU and DSNU calibrations            | √ | √ |
| Non-volatile calibration data storage | √ | √ |
| Programmable I/O                      | √ | √ |

## Dimensions



## Adimec support

Adimec Sapphire cameras are designed, optimized and calibrated for demanding inspection and metrology applications.

Additionally the Adimec application experts support our customers in integrating the Sapphire camera and tuning the images to fit their measurement.

Please contact your Adimec representative for further assistance.

**For maximum image quality, performance, and reliability in demanding applications - Choose Adimec**

|                           |                    |                    |                    |                   |
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