

# Aurora CMOS Camera

## AR455

### 61.2 Megapixels at Up to 4 fps

Designed and manufactured in the USA with the same extreme reliability as the thousands of FLI OEM cameras. Install in remote observatories around the world with complete confidence in a long, trouble-free life. Full frame sensor with 90% quantum efficiency and massive 43.1mm diagonal field of view to increase throughput.

#### Technical Data

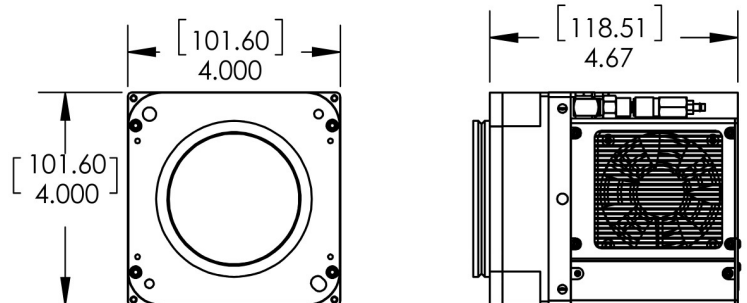
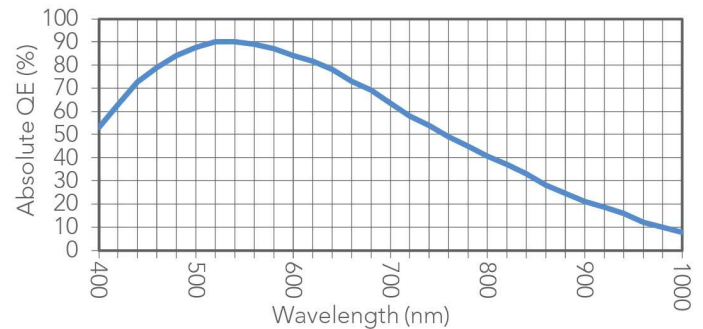
|                                   |                                    |
|-----------------------------------|------------------------------------|
| <b>Sensor Type</b>                | Back Illuminated CMOS              |
| <b>Sensor</b>                     | Sony IMX455                        |
| <b>Shutter Type</b>               | Rolling; Rolling with Global Reset |
| <b>Active Pixels</b>              | 9568 x 6380                        |
| <b>Pixel Size (microns)</b>       | 3.76 x 3.76 $\mu\text{m}$          |
| <b>Imaging Area (Diagonal)</b>    | 36 X 24 mm (43.2 mm)               |
| <b>Full Well Capacity (e-)</b>    | 50000 electrons                    |
| <b>Typical Readout Noise</b>      | 1 e- (rolling)                     |
| <b>Dynamic Range</b>              | 93.6 dB                            |
| <b>Frame Rate (fps)</b>           | 4 fps                              |
| <b>Cooling Method<sup>1</sup></b> | Air or optional Liquid             |
| <b>Max. Cooling (Air)</b>         | 50°C below ambient                 |
| <b>Temperature Stability</b>      | 0.1°C                              |
| <b>Dark Current (typical)</b>     | 0.002 eps at -20C                  |
| <b>Interface</b>                  | USB 3.0                            |
| <b>Data Bit Depth</b>             | 12 / 16 bit                        |
| <b>Optional Shutter</b>           | None                               |
| <b>Optional Mounts</b>            | Nikon F-Mount                      |
| <b>Subarray Readout</b>           | Yes                                |
| <b>External Trigger In/Out</b>    | Yes                                |
| <b>SDK / Software</b>             | Kepler / FLI Pilot                 |
| <b>Weight</b>                     | 2 lbs (.9 kg)                      |

<sup>1</sup>Cameras are plumbed for liquid circulation; External liquid circulation connectors sold separately.



Aurora with FLI Dovetail Flange

#### Absolute Quantum Efficiency



See [FLIcamera.com](http://FLIcamera.com) for alternate configurations



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