

# Aluma 47-10

The Aluma 47-10 has a back-illuminated full frame 1 megapixel CCD with exceptionally high quantum efficiency.

Choice of Midband, Broadband or UV-enhanced coating.

Aluma is designed to operate either via USB 2.0 or WiFi 802.11 b/g/n. Fast low-noise readout. Aluma can be operated from a tablet or smartphone, or from a Windows, Macintosh, or Linux PC.

### Multi-Platform Operation

Designed from the ground-up to support operation on any modern computing platform, Aluma is compatible with iOS, Android, Windows, Macintosh, and Linux. Fully-documented and supported drivers are available for all platforms, including ASCOM drivers. The Aluma camera interface specification is fully documented, supporting the development of fully custom applications.

### Software Included

All Aluma models ship with MaxIm LT for Windows. In addition our new Aluma software for iOS and Android is under development. Aluma also supports third-party applications through ASCOM and native drivers.

### Mechanical Shutter

The Aluma 47-10 has an even illumination shutter perfect for photometric applications. The high reliability mechanical shutter facilitates accurate dark/bias calibration frames.

### Efficient 2-Stage TE cooling

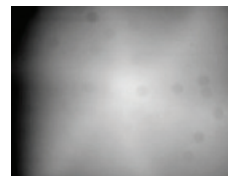
The Aluma uses two-stage TE cooling, twin variable-speed fans and a heat sink design optimized using computer thermal flow simulation. Cooling Delta up to 50C with forced air.

### External TTL trigger input and output



- Optional Adaptive Optics
- Optional Self tracking unit
- Optional 8 position filter wheel
- Optional Secondary tracking Camera

CCD	E2V CCD47-10
Array Size (pixels)	1056 x 1027
Pixel Size	13 x 13 microns
Imaging Area	13.3 x 13.3 mm
Imaging Diagonal	18.8 mm
Read Noise	5 e-
Linear Full Well (typical)	100K electrons
Dynamic Range	83 dB
Max QE	90%
Anti-blooming	none



Twilight Flat from Iris/  
Leaf shutter



Twilight Flat from SBIG  
Even-Illumination  
Shutter