

Walden Small All-Sky Imager

Computational Physics, Inc., has developed a small, all-sky fisheye spectral imager.

This compact instrument is capable of imaging an entire 180° field of view, simultaneously.

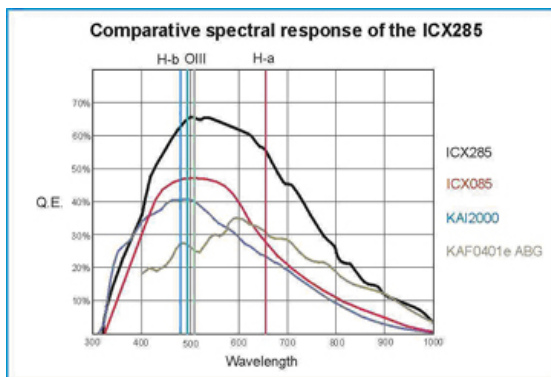
Optically, the all-sky field of view is imaged onto a 1392 x 1040 pixel Sony CCD at F/0.95.

A telecentric design ensures that all the chief rays are at normal incidence at the image plane, allowing the use of narrow bandpass interference filters (<2nm) in the five-position filter wheel.



Applications

- All-sky imaging
- Auroral imaging and detection
- Cloud monitoring
- Astronomical extinction measurements
- Meteor imaging and detection
- Aerosol and pollution monitoring
- Security and surveillance



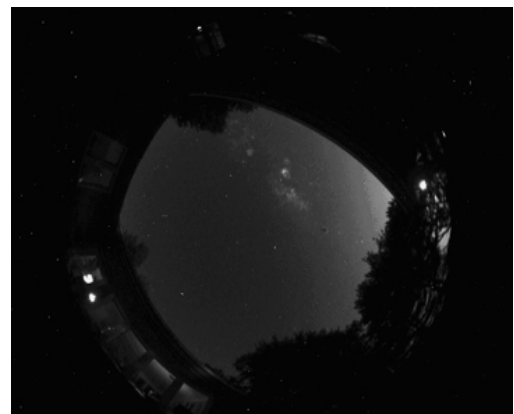
Quantum efficiency of CCD detector



All-Sky Imager with filter wheel

Features

- Mounting: vertical (as a mast)
- Finish: anodized
- Field of view: 180°
- Camera: Atik 314L+
 - CCD: Sony ICX285AL
 - 1392 x 1040 pixels
 - 6.45m x 6.45m pixels
- Chip dimension: 8.9mm x 6.7mm
- Peak QE: 65% at 540nm
- Full well capacity: 27,000 e-
- Dark current: 0.02 e-/s @ 10C ambient
- USB 2 built-in computer interface download rate: 3.75
 - Full resolution
- Computer included
- Software: Maxim DL or CPI's ImageTool



All-sky image at 656.3nm (Balmer Alpha) taken near Boston, MA
Five minute exposure; nebula is the North American Nebula

List of Services

- All instruments delivered complete
- All products use a common software, included
- Opportunities for training, service and maintenance arrangements, and software updates are available upon request

