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Opening Hours

10am-5:30pm Mon-Fri
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Starlight X-Press SX-46 Cooled Camera

AUD
\$7,499.00

Product Images



Short Description

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Description

The Trius SX-46

The SX-46 is a full-frame CCD camera with a 16.7 megapixel sensor. It utilises the popular KAF-16200 sensor, which has an 'APS-H' format array of 27 x 21.6 mm, 6uM square pixels. The use of a full frame chip requires a mechanical shutter and so SX have developed a custom 'roller blind' assembly that uses mini stepper motors to provide an extremely uniform shutter action.

The SX-46 incorporates many special features that improve on some other KAF-16200 based products:

- 1) A multi-coated synthetic sapphire input window. The extremely high thermal conductivity of sapphire (about 25x better than glass) eliminates the need for a window heater, by conducting waste heat from the camera body to the entire window surface. Dewing of the window is extremely unlikely to occur, even with maximum CCD cooling.
- 2) A stepper driven roller blind shutter with extremely uniform illumination of the sensor, even at 0.1 second exposure time. The shutter is designed for robust long-term use, but is also very easy to service or replace, if necessary.
- 3) A compact, dry argon filled CCD chamber, with O ring sealing. No desiccant to regularly replace. The window is easy to clean with an air duster or soft cloth.
- 4) Built-in LED flood illuminator for RBI elimination (trapped electrons from previous images).
- 5) Fast image download time - approximately 6.5 seconds for a full 16.7 megapixel image.
- 6) A three stage Peltier cooler to give better than -50C below ambient, with an efficient temperature controller to keep power consumption to less than 2 amps at 12v DC.
- 7) Standard 'Trius' 3 port USB 2 hub built-in.
- 8) A compact overall size of 136 mm square and 70 mm deep (+ handles). Only 1.7 Kg total weight.

Camera performance:

Active area	27 x 21.6 mm (APS-H format)
Number of pixels:	4540 x 3640
Pixel size:	6.0 x 6.0 uM
Read noise:	9e typical
Full well capacity:	Approx. 41,000e
Peak QE:	Approx. 58% at 530nm
Camera gain:	0.6e / ADU

Additional Information

Specifications	N/A
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