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## STL-6303E

### Typical Specifications



CCD	
CCD	KAF-6303E/LE
Total Pixels	6.3 million
Array	3072 x 2048 pixels
CCD Dimensions	27.7 x 18.5 mm
Pixel Size	9 x 9 $\mu$
CCD Type	Full Frame
CCD Class Available	Class 1, 2
ABG/NABG	NABG standard / ABG on request
Full Well Capacity	100,000e-
Dark Current e-/p/s at 0°C	0.3e-
Read Noise	13.5e- RMS
Gain e-/ADU	1.4 unbinned / 2.3 binned
Full Frame Download	~15 seconds
Antiblooming	Optional
Peak QE	68%
Focal Length at 1 arcsecond per pixel	73 inches
FOV at 1 arcsecond per pixel	0.9 x 0.6 degrees

Camera Mechanical Specifications	
Dimensions	6.5 x 6 x 3.5 inches (16.5 x 15.2 x 8.9 cm) excluding nosepiece and handles
Weight	Approx. 4 lbs. (1.8kg) without filters
Computer Interface	USB 1.1 (transfer rate approx. 425,000 pixels/second)
Telescope Interface	Threaded accessory ring, mounting plate and 2" nosepiece supplied, Nikon 35mm lens adapter optional
Filter Wheel	5 position internal carousel accepts 48mm threaded filter cells and 2" unmounted round filters

Shutter	Internal Mechanical Shutter on all cameras, plus electronic shutter on Interline CCDs
Cooling	2 stage thermoelectric, water circulation, -40°C below ambient with uncooled water, regulated to +/- 0.1 degree (~32°C air only). Further cooling may be achieved by using water cooled below ambient and above the dew point.
Backfocus	Approximately 1.7 inches +/- 0.1 inches (~4.3 cm +/- 0.25 cm) with 2" nosepiece attached
Power Requirements	10 – 18VDC, 12VDC nominal, Universal 110 - 220VAC to 12VDC desktop supply provided (extension cord and 12VDC field power cord are optional)
Carrying Case	Pelican 1550 Case with custom cut foam insert
Software	CCDOPS ver. 5.xx, CCDSoftV5, CCDSharp, TheSky v.5, level II

Remote Head Mechanical Specifications	
Dimensions	2.75 x 2 x 2 inches (7 x 5 x 5 cm) excluding nosepiece and desiccant plug
Weight	Approx. 0.5 lbs. (0.23kg)
Computer Interface	USB 1.1 through main camera to computer. Proprietary protocol between remote head and camera body.
Telescope Interface	T-thread or supplied 1.25" nosepiece, optional T-thread to C-mount and 35mm camera lens adapters
Shutter	Internal Mechanical Shutter for dark frames plus electronic shutter for short exposures
Power Requirements	None (Remote head receives power through the head cable from the main camera)
Mounting connections	1/4-20 threaded hole on side of camera housing

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