



420 N Bonita Ave.
 Tucson, AZ 85745
 phone: (520) 884-8821
 fax: (520) 884-8803
 e-mail: info@specinst.com

Our Quotation # 005149-01

05/25/2004

Quoted To:

**UCAR
 P.O.Box 3000
 Boulder CO**

Quotation Valid Thru : 11/08/2004

Terms : See Below

FOB: Tucson

Attention : David Elmore

Phone (303)497-2176

Fax (303)497-1589

Item	Part / Rev / Description / Details	Quantity	Unit Price	Extended Price
001	<p>0000 Rev -</p> <p>Series 800 Cooled CCD camera fitted with an KAF 4320E CCD.</p> <p>The CCD has 2048 x 2048 24 micron pixel format. The CCD is grade 1. The CCD is built with the Indium tin Oxide front illuminated gate structure for a mid-band peak Q.E. response of ~65% at 550 nm. (Not verified at SI)</p> <p>The camera is provides four readout ports operating at 3MHz. The camera will use 14-bit AtoD converters. Dynamic range is 16,000:1.</p> <p>At a read out rate of 3MHz and binned 1x1 the expected read noise is ~40e- (AtoD quantization noise limited). 1x1 bin full frame read rate TBD.</p> <p>The camera is cooled to -30°C by use of a thermo electric closed cycle liquid cooling unit.</p> <p>The camera provides a maximum single pixel capacity of at least 450,000e-.</p> <p>The camera consists of the camera head, a power supply unit that is connected to the camera head by a 20' cable, a PolyScience Model 612 liquid chiller that is connected to the camera head by 20' cooling lines, a PCI camera communication and data interface module that connects to the camera controller by a 20' ATA style parallel data interface.</p> <p>The camera is supplied with SI Image camera control and image acquisition software. Images can be saved in TIFF or FITS formats.</p>	1.00	68,774.00000	US\$ 68,774.00

Technical specifications are complete, adequately defined, and can be met by Spectral Instruments.



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Item	Part / Rev / Description / Details	Quantity	Unit Price	Extended Price
	Proper values for the items listed as TBD will be available in 4 weeks.			
	Terms: Net 30 Warranty: 12 months Delivery: 18 weeks ARO Rev. 1: Extended Expiration Date			

Technical specifications are complete, adequately defined, and can be met by Spectral Instruments.