

VATT Spectrograph

- This optical region spectrograph has AR coated refractive optics, with a beam size at its camera of 125 mm, giving ...
- slit length: 30 arcsec
- wavelength range: 360 - 950 nm
- spectral coverage: 100 nm at 0.1 nm resolution
- spectral resolutions: 0.1, 0.2, and 0.4 nm with 1 arcsec wide slit
- detector: back illuminated, low noise CCD STA0520A, with very nice cosmetics.

STA0520A CCD

2688×512 pixels, 15 microns

ITL Serial Number 8228

Detector operating temperature -110C

Gain = 1.3 e/DN with setting 10

Gain = 2.6 e/DN with setting 5

For both gains the full well is ADC limited (65k DN), so this is 85,000 or 170,000 electrons.

Noise is 3.4 electrons (3.2 in overscan region)

- [efficiency](#): determined by Mark Wagner for telescope plus spectrograph
- further details are under the [General Instructions](#) for use of the VATT Spectrograph.
- bandpass [filters](#) available: S8612 (red blocking); GG-400, GG-475, OG-550 (cut-offs to the blue in nm).

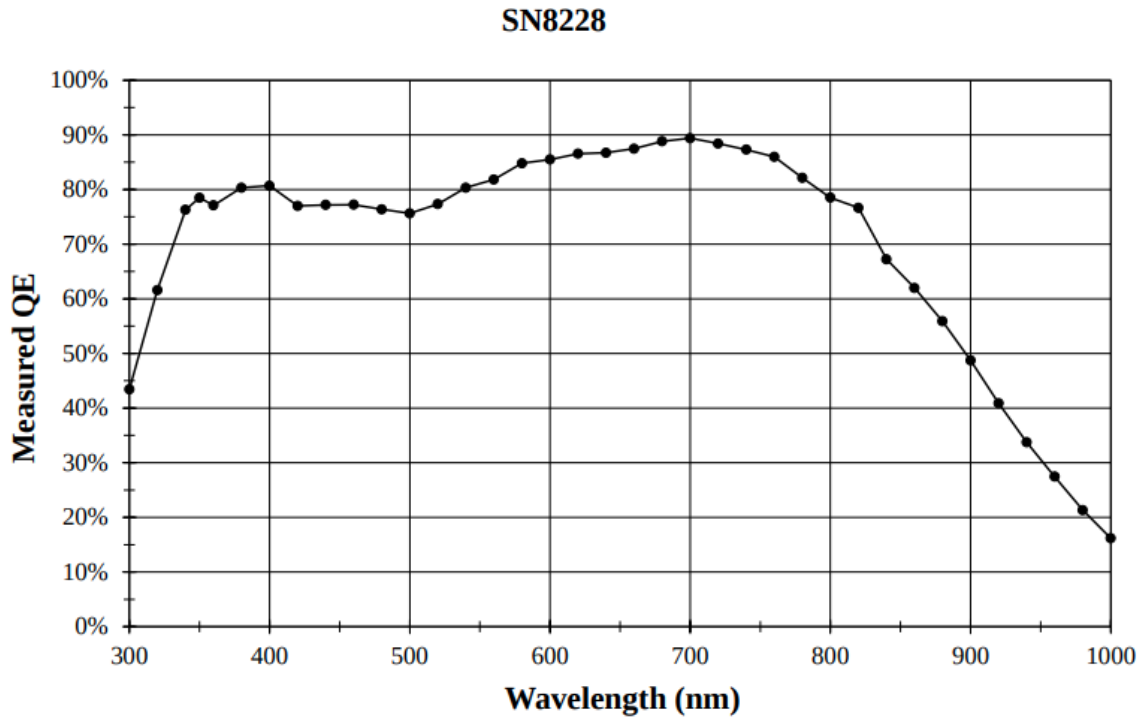
Documentation

- [General Instructions](#)
- [Instructions on Guiding](#)

Maintenance

- Argon Calibration Lamp was replaced on 4/26/2013.
- Note: There is some concern the lamps are burning out faster than they should.

Chip QE Curve



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