



Technical Specifications



High Performance Spectrometer Series



StellarNet's **Quasar-UltraCool** combines the high-throughput Quasar optics for 10x optical gain and Low Dark Current (LDC) detector technology to provide lower background noise than traditionally possible.

Features and Benefits:

- 10x Optical Gain for Enhanced Sensitivity and Speed
- Low Dark Current Technology
- Deep Cooled CCD Detector
- Precision and Repeatability
- Designed for Raman with more models coming soon!

Model Ranges and Resolutions

Model	Wavelength Range (cm-1)	10x Optical Gain	Resolution (cm-1)	Detector Cooling ~°C Below Ambient
Quasar-UC-785	200-2,750	Yes	4	UltraCool Vacuum 80°C
Quasar-UC-532	200-4,500	Yes	9	UltraCool Vacuum 80°C

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Spectrograph Aperture: f/2	Detector Type: Low Dark Current CCD - Front (FI) or Back-Illuminated (BI) options	Quantum Efficiency (max) FI = ~68% BI = ~95%
Gratings: Transmissive High Throughput	Active Pixels: FI = 1650 x 200 BI = 2000 x 256	Dimensions: 10 x 9 x 6"
Optical Gain: >10x signal enhancement	Pixel Size: FI = 16 x 16 µm BI = 15 x 15 µm	Operating System: Windows, Linux, Mac
Optical Input: SMA-905	Signal-to-Noise: >3000:1 @ long exposure times	Interface: USB
Stray Light: <0.05%	Active Pixel Well Depth FI = 120,000 e- BI = 150,000 e-	Software: All StellarNet Software