

SP642

The Choice for Low Signal Level Applications

- Scientific-grade high performance with low cost
- Low dark noise and stray light
- Good dynamic range and high signal to noise ratio
- High Ultra-Violet Quantum Efficiency
- Flexible optical input direct to slit or via fiber
- Designed from the ground up for a wide range of applications
- High speed data acquisition
- Standard design allows up to 200 - 1050 nm range
- Auto shutter for dark condition



| Full Specifications

Detector :

Hamamatsu S10420-1106(Non TE-Cooled Backthinned FFT CCD)

- ▶ Number of Pixels : 2048 X 64
- ▶ Sensing Pixel Size : 14 μm X 14 μm
- ▶ Well depth : 200 ke-
- ▶ Quantum efficiency : > 90% @650 nm, 65% @250 nm

Wavelength Range : 200 – 1050 nm

Dark Noise RMS : < 7 RMS @35 msec

Signal to Noise Ratio : > 450:1

Fiber Coupler : SMA905 of FC standard

Order Sorting Filter : Longpass filter or linear variable filter installed per wavelength coverage

Optical Resolution : 0.25 – 7 nm depending on the slit and grating choices

Stray Light Level : < 0.01% @632 nm (< 0.5% AVG)

Computer Interface : USB 1.1/2.0 compatible

Min. Exposure Time : 7 msec

Trigger Mode : Free Run / Software Trigger / Hardware Trigger

Operation System : Windows 7/10/11 (32/64 bit)

SDK Support : Visual C++ / Visual Basic / LabVIEW

Slit Options : 10, 25, 50, 100, 200 and 400 μm

Temperature Induced Shift : ± 1 pixels per ± 15 °C

Dimensions/Weight : 152 mm X 100 mm X 63.6 mm / 1.2 kg