



### 1024x256 BI DD Scientific CCD Detector

#### The Most Sensitive Detector in NIR Without Etaloning Effects

This detector is ideal for low light level applications in the NIR (600-1100 nm) including Raman, Photoluminescence, and Fluorescence spectroscopy. It offers the advantage of the high back illuminated quantum efficiency and the deep depleted technology for minimizing etaloning effects (oscillations superimposed on the CCD data due to the layer thickness of the classical Back Illuminated chip). This detector is available in LN2 cooled head only.

#### Specifications

##### Chip Format:

Pixel format: 1024x 256  
Pixel size: 26  $\mu\text{m}$  x 26  $\mu\text{m}$   
Image Area: 26.6 mm x 6.7 mm

##### Readout noise:

4 electrons rms at 20 kHz (Typical)  
 8 electrons rms at 20 kHz (Maximum)

##### Pixel full well capacity:

700  $\text{ke}^-$  (Typ), 400  $\text{ke}^-$  (Min)

##### Response non uniformity:

Maximum +/- 10 % of mean

#### Detector Specifications:

Typical Dark signal:  
 1 electron/pixel/hour

##### Maximum Dark signal:

2 electron/pixel/hour

Response non-linearity :  $\pm 1.5$  % with signal levels up to 140  $\text{ke}^-$

#### Cooling options:

-90°C to -140 °C in LN2 cooled housing.  
 -30 °C in mini forced air cooled thermoelectric housing not available.

Since Jobin Yvon is continually striving to improve the quality of our products, these specifications are subject to change without notice. Please contact your sales representative for the latest information.

#### In the USA:

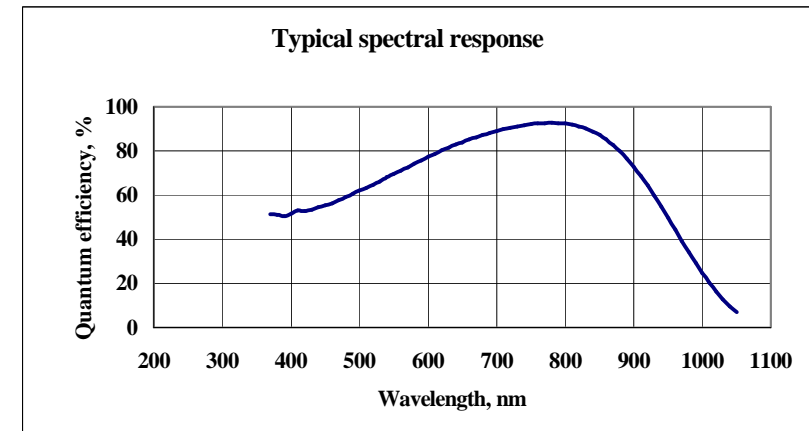
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**Italy:** 2/57.60.30.50  
**Japan:** (81)3-5823-0140  
**U.K.:** 020-8204-8142



CCD 1024x256 Back Illuminated Deep Depleted quantum efficiency (Manufacturer information 25 °C)

#### Features

- Scientific Grade 1 CCD
- Back Illuminated Technology
- Deep Depletion Format
- 6.7 mm High CCD
- Optimization in Vis/NIR

#### Benefits

- Ideally suited for low light level detection in spectroscopic applications.
- High Quantum Efficiency.
- Dramatically minimizes etaloning effects in NIR range
- Perfect for Multi tracking or binning measurements.
- Designed for Visible and NIR spectroscopy.