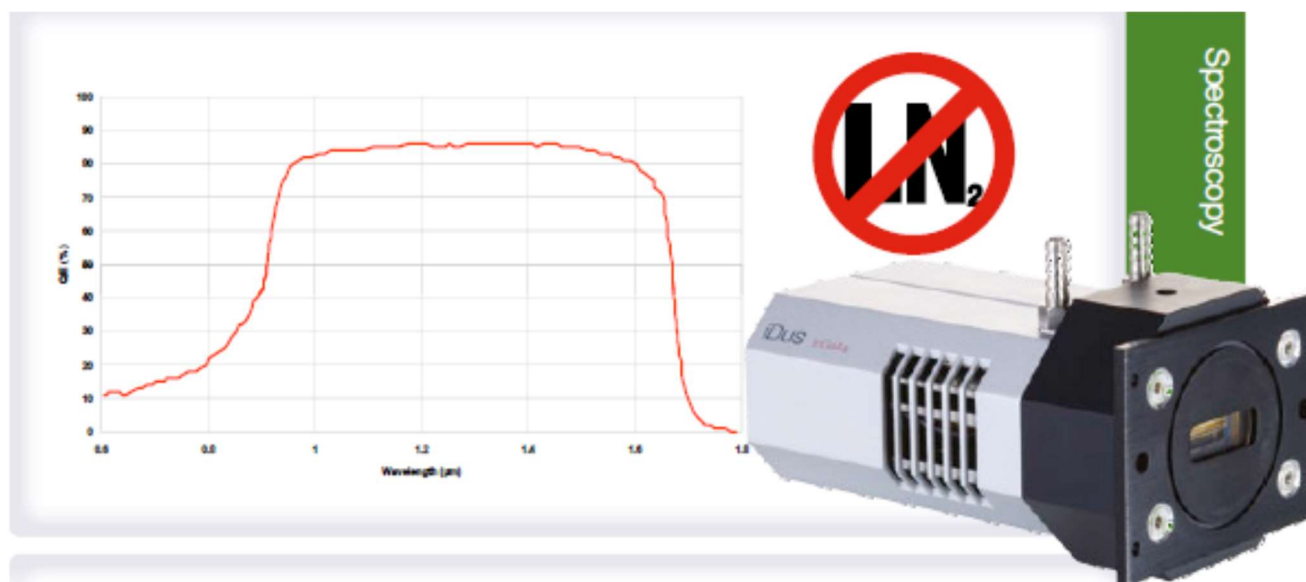


## InGaAs- array detector from Andor suitable for inVa Reflex Raman



### Features and Benefits

- **0.6 to 1.7  $\mu\text{m}$**   
Operating wavelength range
- **Peak QE of > 85%**  
High detector sensitivity
- **TE cooling to  $-90^{\circ}\text{C}$  \***  
Negligible dark current without the inconvenience of  $\text{LN}_2$
- **UltraVac™ v2**  
Permanent vacuum integrity, critical for deep cooling and sensor performance
- **Single window design**  
Delivers maximum photon throughput
- **25  $\mu\text{m}$  pixel width option**  
Ideal for high-resolution NIR spectroscopy
- **Simple USB 2.0 connection**  
USB plug and play – no controller box.  
Inputs & Outputs: External Trigger, Fire and Shutter TTL readily accessible. I<sup>2</sup>C for the more adventurous user
- **Software selectable output amplifiers**  
Allows user to optimize operation with choice of High Dynamic Range (HDR) or High Sensitivity (HS) modes of operation
- **Minimum exposure time of 1.4  $\mu\text{s}$**   
Enables higher time-resolution and minimization of dark current contribution for applications with reasonable signal level

### Andor's iDus InGaAs detector array for Spectroscopy

Andor's iDus InGaAs 1.7 array detector series provides the most optimized platform for Spectroscopy applications up to 1.7  $\mu\text{m}$ . The TE-cooled, in-vacuum sensors reach cooling temperatures of  $-90^{\circ}\text{C}$  where best Signal-to-Noise ratio can be achieved. Indeed dark current will improve moderately below  $-90^{\circ}\text{C}$  where scene black body radiation will dominate, while Quantum Efficiency of the sensor will be greatly impacted at these lower temperatures and lead to a lower Signal-to-Noise ratio.

### Specifications Summary

Active pixels	512 or 1024
Pixel size (W x H)	25 x 500 or 50 x 500 $\mu\text{m}$
Pixel well depth (typical)	
High Dynamic Range mode	170 $\text{Me}^-$
High Sensitivity mode	5 $\text{Me}^-$
Maximum cooling *	$-90^{\circ}\text{C}$
Maximum spectra per sec	193
Read noise (typical)	580 $\text{e}^-$
Dark current (typical)	11.7 $\text{ke}^-/\text{pixel}/\text{sec}$
Minimum exposure time	1.4 $\mu\text{s}$