

## **An Affordable Camera for Professional Performance**

From Inside of Jireh Technologies Comes a New Division:

## **Features and Benefits**

- Industry standard 1024x256 pixel spectroscopy array
- · Air Cooled or Liquid Cooled
- USB 2.0 & Ethernet Interfaces for easy installation
- Fully Integrated small package design
- Software Engineered to integrate with most popular Spectrometer
- Industry Standard
   Spectroscopy Mount
- Software Development Kit (SDK) Ease of control integration into complex setups: Matlab, Labview, Visual Basic or C/C+

## Jireh Scientific Imaging Presents:



Jireh Scientific Imaging (JSI) introduces a Spectroscopy Camera that will fit your needs <u>AND</u> your budget! We are putting a stop to these well-known camera



companies expecting you to pay more for options you do not need. In addition, promising a revolutionary spectroscopy camera but instead they bring a radical cost increase.

The **ZION** was designed and engineered not only for low noise quantitative spectroscopy applications but also with the end-user's and OEM applications' budget in mind. This affordable solution is a compact, yet an abundance-enriched platform suitable for the most demanding spectroscopy applications, as well as R & D routine laboratory operation and integration into industry-grade systems. The 1024 array with 6.7 mm CCD height and 26 mm spectral coverage is ideal for multi-stripe spectroscopy and maximum light collecting area. It's truly an affordable camera for professional performance, period.

SUMMARY SPECIFICATIONS (SPECS BELOW ARE AVERAGE/TYPICAL AND SUBJECT TO CHANGE)						
CCD Sensor	Industry Standard e2v CCD 30-11 High Performance Sensor					
Pixel Size	26 x 26 um					
Image Area	26.6 x 6.6 mm					
Blemishes	Grade 1 According to CCD Manufacturer's Specifications					
Standard ADC speed/bits	500 KHz/16 Bits					
	Air Cooled				Recirculating C	coolant
Max Cooling Temp (Celcius)	-55				-70	
Dark Current e/pix/sec (Typical For Front Illuminated)	0.08				0.003	
Optional Single ADC speeds (Factory Set)	100 KHz/16 Bits		500 KHz/16 Bits		1 MHz/16 Bits	
System Read Out Noise (e-) (Typical)	6.5 @ 100KHz		13.5 @ 500KHz		20 @ 1MHz	
Spectrometric well capacity	Typical					
Single Pixel	500 Ke-					
Binned	1000 Ke-					
Data Interface	USB 2.0/100 Mb Ethernet					
CCD Sensor	ВІ	BI DD	FI	FI OE	FI DD	Units
Pixel Well Depth, typical	500	700	500	300	700	k e- / pixel
Readout Well Depth, typical (for binning)	1000	1400	1000	1200	1400	k e- / pixel
						e- /pixel/
Dark Current @ -55 C	0.3	2	0.08	0.08	1	sec

Here are some of the many applications for the Zion 256 Camera Series: Raman, LIBS, Emission, Absorbance Reflectance, Fluorescence, OEM Integrated Systems, Photoluminescence & Electroluminescence

## JIREH SCIENTIFIC IMAGING

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