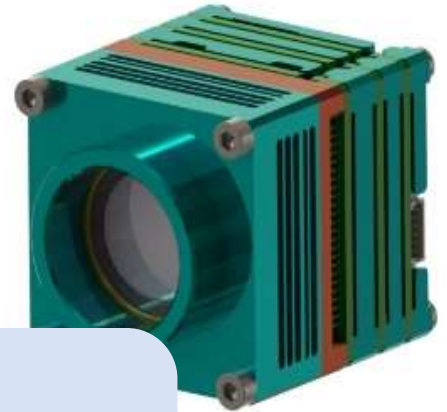


# JAGUAR-HD

AJ2C10C01

High Resolution, High Performance InGaAs camera, a revolution in SWIR Imaging.



## Salient Features

- 1280 x 1024 Array Format
- InGaAs sensor
- 160 fps @ 13 bit resolution full frame
- 0.6 to 1.7  $\mu\text{m}$  spectral band
- 12V Single Power Supply
- 13-bit digital data, Full Camera Link, (USB 3.0, 50 FPS)
- Analog (PAL/NTSC) output
- On-Board NUC Calibration

## Applications

- Passive/Active Night Vision
- Security and Surveillance
- Image Lasers / 3D ranging
- Semiconductor
- Glass Production
- Pharmaceutical Monitoring
- Scientific and Medical

*Specifications mentioned in the document may change without prior notice, please contact sales for latest specifications*

# SPECIFICATION

<b>Camera</b>	
Detector	<i>InGaAs</i>
Spectral Band	<i>0.6 μm - 1.7 μm</i>
Sensor Format	<i>1280x1024 or higher</i>
Pixel Operability	<i>&gt;99.5%</i>
Pixel Pitch	<i>&lt;=10μm</i>
Quantum Efficiency	<i>&gt;=80% @ 1550 nm</i>
Non-Uniformity Without Correction	<i>&lt;10%</i>
Image Capture	<i>Programmable Frame Rate, Window Mode, Integration Time &amp; Gain Modes</i>
Frame Rate	<i>160 Hz@ 1280x1024;</i>
<b>Image Processing</b>	<i>2- Point NUC correction tables (&gt; 20 Nos)</i>
	<i>Easy Field Calibration for 1-Pt correction</i>
	<i>AGC image correction</i>
	<i>Bad Pixels Detection and Replacement</i>
	<i>Invert/Revert</i>
	<i>On Screen Display (Tint, NUC table number, Date, Time, Sys temp, FPA temp)</i>
	<i>Freeze Function</i>
Video Interface	<i>High Speed Camera-Link Interface (Full/Medium) Ten tap configuration, USB 3.0 (50 FPS)</i>
Camera Control	<i>Camera-link/RS232/USB 3.0</i>
Optical Interface	<i>C-Mount</i>
External Trigger	<i>Camera should accept External Trigger / Laser Source Trigger pulse with 15nm step size and programmable delay up-to 100 ms (for ranging applications)</i>
Camera Noise	<i>≤ 150 e- at 1 ms exposure time</i>
Dynamic range	<i>≥ 50 dB</i>
Ambient operating temperature	<i>-20 °C to +60 °C</i>
Storage Temperature	<i>-30 °C to +80 °C</i>
Input Power	<i>9 to 24V DC</i>
Power Consumption	<i>&lt; 15 W (TEC ON Mode); &lt; 5W (TEC Mode off)</i>
TEC Controller	<i>a) Mode TEC cooling ON/OFF b) Temp controls up-to 50mK; c) Customer programmable temperature settings</i>
Maintenance	<i>a) System upgrade of the firmware through USB; b) Diagnostics of Imager Life, Self-Test, System Temperature; c) Non-volatile Factory firmware for recovery procedure</i>
PC GUI Software	<i>a) Complete Controls of Imager Operation</i>
	<i>b) Alpha-Numeric OSD Display</i>
	<i>c) Capture Snapshots/ Photos and store as JPEG/BMP Images</i>
	<i>d) Image acquisition of grayscale and Pseudo color Palettes</i>
	<i>e) Video Capture and Display in Standard MPEG/AVI formats</i>
	<i>f) Sensor related controls</i>
	<i>g) OSD Logo Upload</i>
	<i>h) Image Zoom/Pan on Live screen</i>
	<i>i) ROI Based Image Analysis</i>
Dimensions	<i>a) ≤ 70 W x 70L x 75H mm b) Provide Mechanical interface drawings with mounting details c) Compatible with IP66 d) Tripod mount capability</i>
Weight of Camera Head	<i>&lt;500 grams</i>
SDK / API	<i>LabVIEW, MATLAB &amp; C/C++</i>

## Analineer Technologies

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