

# Piranha3 P3-8x (Prelim)

*With 320MHz throughput and up to 12k of resolution, these cameras inspect and detect with unrivalled precision and speed.*

**The next generation of Piranha line scan cameras have arrived with more power, more speed and more resolution than ever before.**

The Piranha3 camera family takes imaging to a new level with eight outputs running at 40MHz and either 8k or 12k resolutions.

The large number of pixels and fast line rates specifically meet the throughput demands of flat panel inspection (Gen7 and Gen8) and printed circuit board inspection. With this large resolution and high speed, these cameras can inspect more panels in the same amount of time than ever before.

Sensitivity is maximized through DALSA's newest IT-Px sensors that were designed and created using our own foundry. All cameras have exposure control with 100x antiblooming. The Piranha3 cameras use Medium or Full Camera Link and are our largest resolution and highest throughput line scan cameras available.



## Features

- Line rates up to 33.7kHz and 320MHz throughput
- High responsivity
- Calibration time is 10 seconds (8k) or 14 seconds (12k)
- Up to 12288 pixels
- 100% fill factor
- 100x antiblooming
- Medium or Full Camera Link

## Programmability

- Flat field correction—minimizes sensor FPN and PRNU, lens vignetting and non-uniform lighting
- Selectable number of taps, bit depth, and Camera Link Mode
- Adjustable gain from -10dB to +10dB
- Offset control
- Test pattern and diagnostics

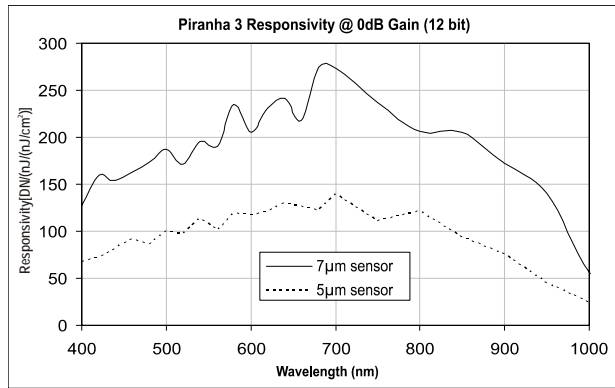
## Typical Applications

- Flat panel display inspection
- Printed circuit board inspection
- Parcel sorting
- High performance document scanning
- High throughput applications

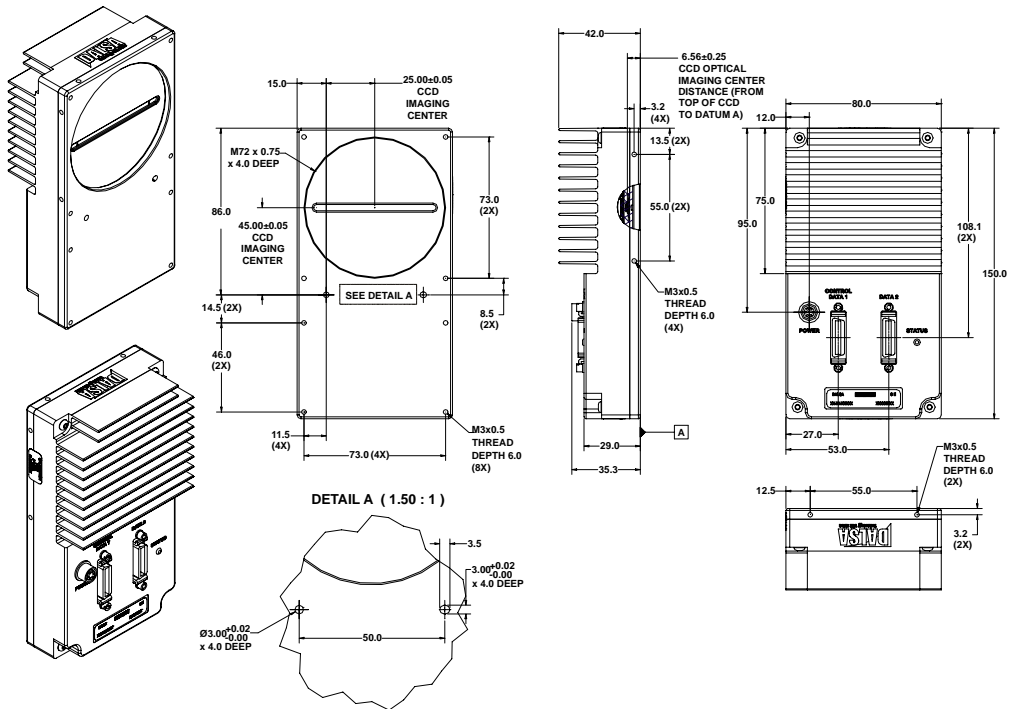
## Camera Specifications

<b>Resolution</b>	8192 / 12288
<b>Data Rate</b>	8x40MHz
<b>Max. Line/Frame Rate</b>	33.7 / 23.5kHz
<b>Pixel Size</b>	8k: 7 $\mu$ m x 7 $\mu$ m 12k: 5 $\mu$ m x 5 $\mu$ m
<b>Data Format</b>	8 or 12* bit Medium or Full Camera Link * 4 tap mode only
<b>Lens Mount</b>	M72x0.75 thread
<b>Responsivity</b>	224 / 112DN/(nJ/cm <sup>2</sup> ) broadband @0dB gain, 12 bit
<b>Dynamic Range</b>	950:1 (12 bit)
<b>Nominal Gain Range</b>	$\pm$ 10dB
<b>Size</b>	150x65.5x80
<b>Mass</b>	< 630g
<b>Operating Temp</b>	0-50°C
<b>Power Supply</b>	12V-15V
<b>Power Dissipation</b>	< 15W
<b>Regulatory Compliance</b>	CE
<b>Control</b>	MDR26 Medium or Full Camera Link
<b>Data</b>	Shared with Control
<b>Power</b>	Hirose HR10 6 pin
<b>Example Part Number</b>	P3-8x-12k40

### Responsivity



### Mechanical Dimensions



### For More Information

For more detailed information on this and other products, including pinouts, timing, software, and signal descriptions see the user's manual. The user's manual is available at <http://vfm.dalsa.com>. You can also contact your local rep or visit our website at <http://vfm.dalsa.com>.

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