

Piranha2 P2-4x (Preliminary)

Piranha2 is smaller, faster, and more responsive than the original...and it has Camera Link™ too.

Line Scan imagers use a single line of sensor pixels to build up a two-dimensional image. Fax machines are low-resolution examples.

The best gets better.

DALSA's Piranha cameras were the fastest linescan cameras in the world...until now. Piranha2 takes performance to an even higher level. Four 8 or 10-bit outputs (selectable) at 40MHz deliver 160MHz throughput, and boosted responsivity means the Piranha2 actually needs less light than the original, even at a 60% greater data rate.

In fact, the Piranha2 brings improvement in virtually every aspect. Available in resolutions from 4k to 8k, the camera is smaller, lighter, and uses less power than the original (and from a single supply). The compact design is shallower than previous cameras for the 4k, 6k and 8k models. Cabling and interface are simplified with the Camera Link™ high-speed serial standard. The camera is more sensitive, but still provides quieter, more uniform output thanks to CDS (correlated double sampling) and embedded flat-field correction algorithms. Gain and offset are fully programmable for each output channel, and the camera can output test patterns for cable/system troubleshooting. All resolutions provide appropriate, readily-available standard lens options (c-mount, f-mount, and M72x0.75 photography standards).

All these features combine to make Piranha2 the most powerful linescan camera in the world. Set it loose on your toughest imaging challenge.



Features

- 160MHz throughput
- Resolutions from 4k to 8k
- High responsivity
- Programmable pixel-to-pixel correction, integration time, line rate, gain, offset, bit depth, test pattern, and diagnostics
- High speed serial output (Camera Link™)
- Single 12V to 15V power supply
- Compact design

Specifications

Resolution	4096 / 6144 / 8192
Pixel Size	7µm x 7µm
Aperture	28.7 / 43.0 / 57.4mm
Lens Mount	See Chart
Max. Line/Frame Rate	36 / 24 / 18kHz
Data Rate	4x40MHz
Data Format	4x8 or 4x10-bit via CameraLink
Responsivity	10DN/(nJ/cm²) @ 0dB
Dynamic Range	up to 492:1
Nominal Gain Range	± 10dB
Size	85x85x50mm
Mass	< 500g
Operating Temp	10-50 C @ front plate
Power Supply	12 to 15V
Power Dissipation	< 10W
Regulatory Compliance	CE, MIL-STD-810E
Example Part Number	P2-43-8192

Applications

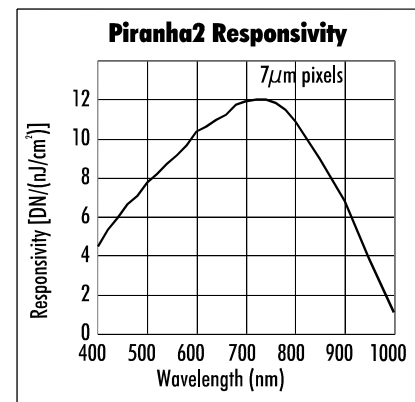
- Printed circuit board inspection
- High performance document scanning/image lift
- Postal/parcel sorting

Sensor

The P2-4x (Preliminary) uses DALSA's latest high-resolution sensor with advanced "pinned photodiode" pixels using DALSA advanced surface gated photodiode technology. Contact DALSA for more information.

Connectors

Control	2xMDR26 Camera Link
Data	MDR26 Camera Link
Power	Hirose HR10 6-pin
Other	none

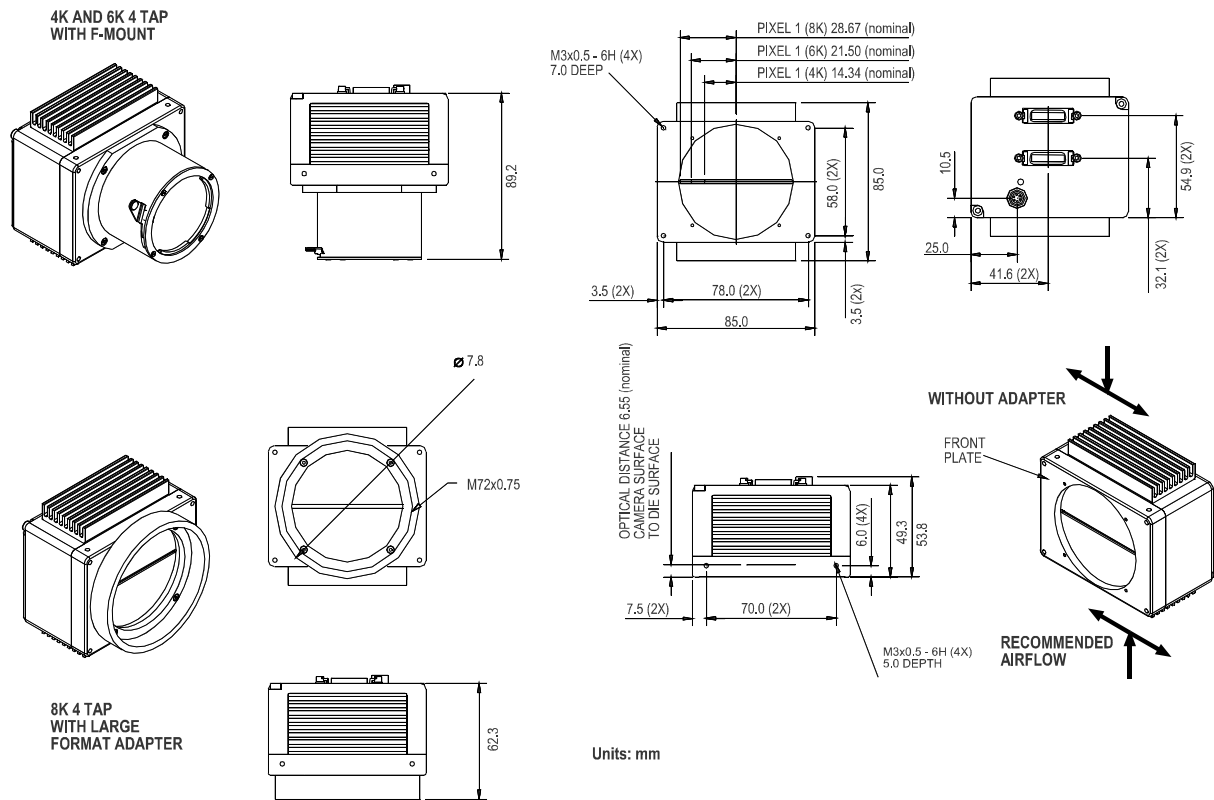


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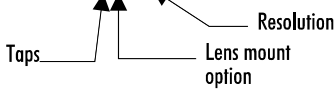
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Mechanical Dimensions



Camera Configuration	Available Lens Mount Options	Order Option	Lens Mount Configuration
4K, 4 Tap	No mount and F-mount	P2-x0-0xk40	No mount or adapter
6K, 4 Tap	No mount, F-mount and M72x0.75	P2-x1-0xk40	C-mount
8K, 4 Tap	No mount, and M72x0.75	P2-x2-0xk40	F-mount
		P2-x3-0xk40	M72x0.75 adapter

E.g. P2-42-06k40 is a 4 Tap, 6k camera with an F-mount



For More Information

For more detailed information on this and other products, including pinouts, timing, and signal descriptions, see the full product datasheet. Contact your local rep or visit our website at <http://vfm.dalsa.com/piranha2>.

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