

# Piranha2 P2-2x (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. Two 8 or 10-bit outputs (selectable) at 40MHz deliver 80MHz 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 1k 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 6k and 8k models, and smaller in every dimension for 1, 2, and 4k 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

- 80 MHz throughput
- Resolutions from 1k 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	1024/2048/4096/6144/8192
Pixel Size	10 / 10 / 7 / 7 / 7µm
Aperture	10.2 / 20.5 / 28.7 43.0 / 57.4mm
Lens Mount	See Chart
Max. Line/Frame Rate	67 / 36 / 18 / 12 / 9kHz
Data Rate	2x40MHz
Data Format	2x8 or 2x10-bit via Camera Link
Responsivity	20DN/(nJ/cm²) @ 0dB
Dynamic Range	up to 492:1
Nominal Gain Range	± 10dB
Size	50x85x50 or 85x85x50mm
Mass	< 450g
Operating Temp	10-50 C @ front plate
Power Supply	12 to 15V
Power Dissipation	< 7.5W
Regulatory Compliance	CE, MIL-STD-810E
Example Part Number	P2-22-4096

## Applications

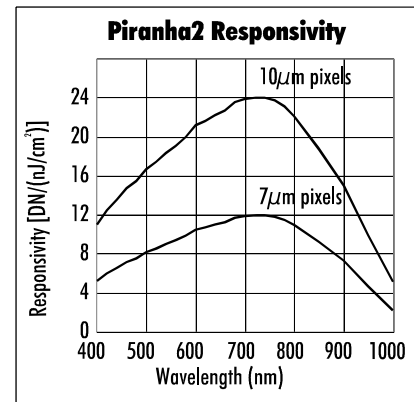
- Printed circuit board inspection
- High performance document scanning/image lift
- Postal/parcel sorting

## Sensor

The P2-2x (Preliminary) uses DALSA's latest sensor with advanced "pinned photodiode" pixels using DALSA advanced surface gated photodiode technology. Contact DALSA for more information.

## Connectors

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



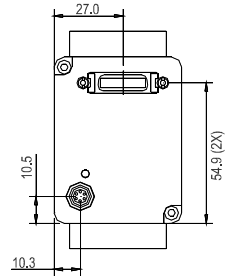
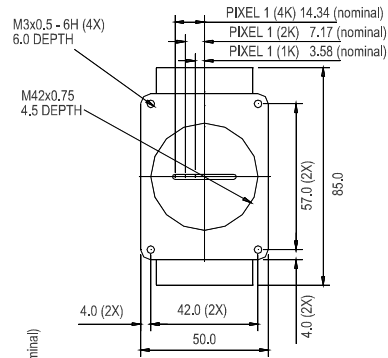
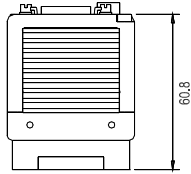
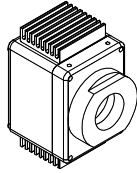
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www.dalsa.com

# Piranha2 P2-2x (Preliminary) Line Scan Cameras

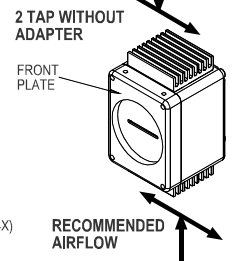
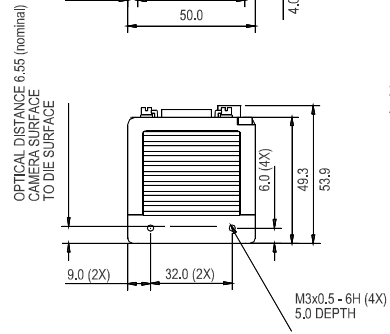
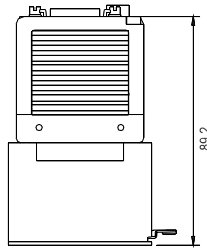
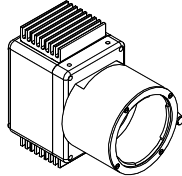
## Piranha2 P2-2x (Preliminary) Line Scan Cameras

### Mechanical Dimensions

1K, 2K, AND 4K 2 TAP WITH C-MOUNT

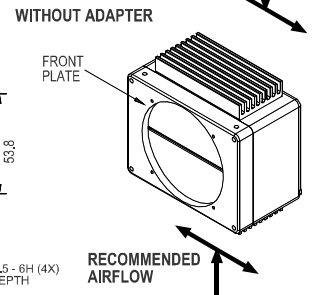
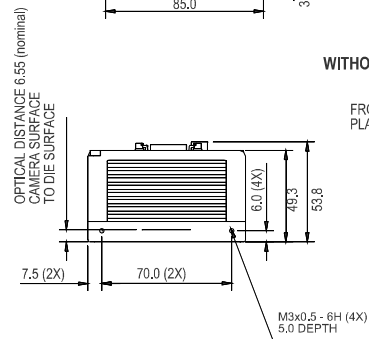
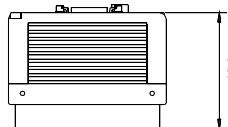
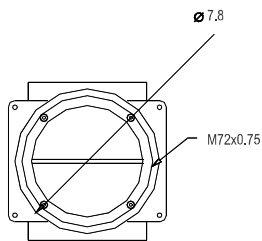
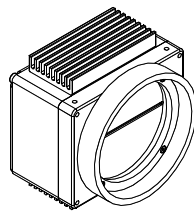
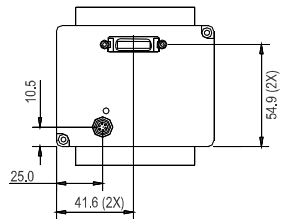
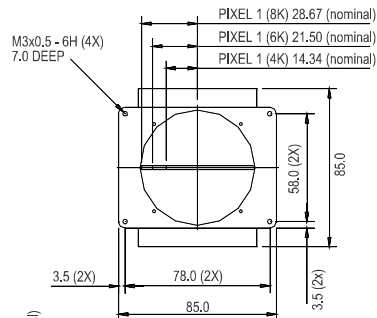
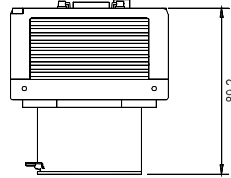
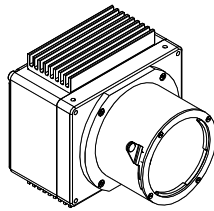


1K, 2K, AND 4K 2 TAP WITH F-MOUNT



Units: mm

6K AND 8K 2 TAP WITH F-MOUNT

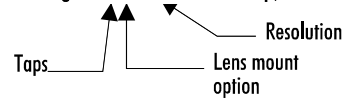


Units: mm

## Piranha2 P2-2x (Preliminary) Line Scan Cameras

Camera Configuration	Available Lens Mount Options	Order Option	Lens Mount Configuration
1K, 2 Tap	No mount and C-mount	P2-x0-0xk40	No mount or adapter
2K, 2 Tap	No mount, C-mount and F-mount	P2-x1-0xk40	C-mount
4K, 2 Tap	No mount and F-mount	P2-x2-0xk40	F-mount
6K, 2 Tap	No mount, F-mount and M72x0.75	P2-x3-0xk40	M72x0.75 adapter
8K, 2 Tap	No mount, and M72x0.75		

E.g. P2-22-02k40 is a 2 Tap, 2k 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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