

# Piranha 3 P3-8x-xxx40

Line Scan Cameras



## Key Features

- Line rates up to 33.7 kHz and 320 MHz throughput
- 8 or 12 bit
- High responsivity
- Calibration time is 10 seconds (8k) or 14 seconds (12k)
- Up to 12288 pixels
- 100% fill factor
- 100x antiblooming
- Small, square body option

## Programmability

- Can save up to four sets of flat field correction coefficients
- Selectable number of taps, bit depth, and Camera Link Mode
- Adjustable gain and offset
- Test pattern and diagnostics

## Typical Applications

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

## Overview

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

The Piranha 3 camera family takes imaging to a new level with eight outputs running at 40 MHz 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 than ever before in the same amount of time.

Sensitivity is maximized through our newest IT-Px sensors that were designed and created using our own foundry. All cameras have exposure control with 100x antiblooming. The Piranha 3 cameras use Medium or Full Camera Link and are our largest resolution and highest throughput line scan cameras available.

The Piranha 3 is now available in a smaller, square body model.

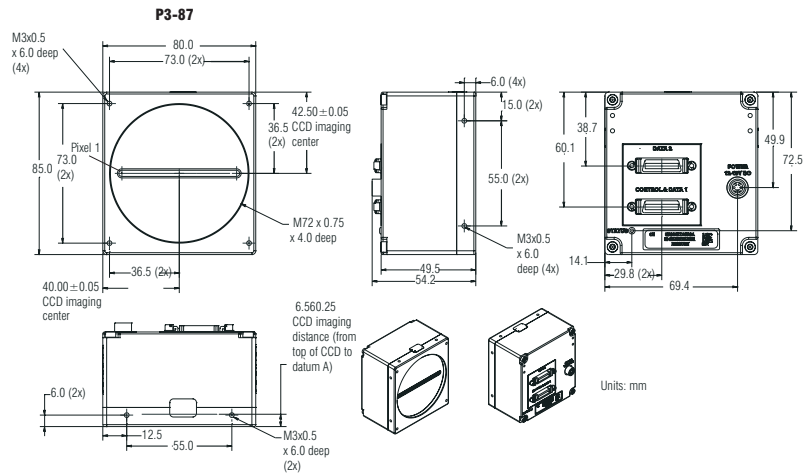
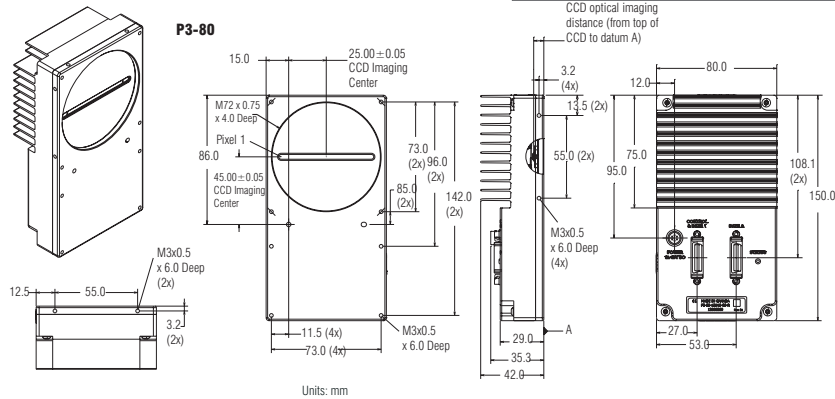
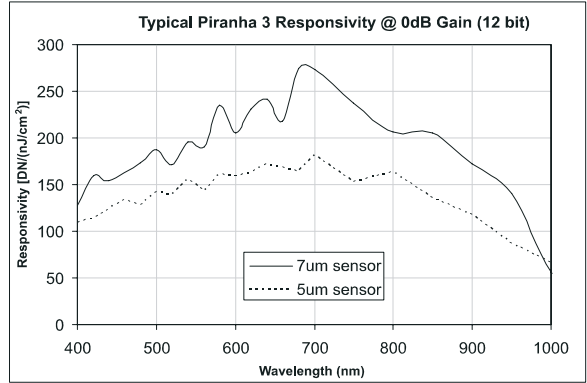
## Specifications

Resolution	8192 / 12288
Data Rate	8 x 40 MHz
Max. Line/Frame Rate	33.7 / 23.5 kHz
Pixel Size	7 / 5 $\mu\text{m}$
Data Format	8, 12 bit
Output	Med, Full Camera Link
Lens Mount	M72 x 0.75
Responsivity	44 / 27 DN/(nJ/cm <sup>2</sup> ) broadband @ +10 dB
Dynamic Range	54 dB
Nominal Gain Range	$\pm 10$ dB
Size	150 x 42 x 80 / 85 x 54.2 x 80 mm
Mass	<630 g / <125 g
Operating Temp	0 °C to 50 °C
Power Supply	12 V to 15 V
Power Dissipation	<15 W
Regulatory Compliance	CE and RoHS
Control	MDR26 Camera Link
Data	Shared with Control
Power	Hirose HR10 6 pin
Example Part Number	P3-80-xxx40

# Piranha 3 P3-8x-xxx40

## Line Scan Cameras

With 320 MHz throughput and up to 12k of resolution, these cameras inspect and detect with unrivalled precision and speed. The new P3 allows you to take your inspection system to the next level.



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Teledyne DALSA is an international leader in digital imaging and semiconductors and has its corporate offices in Waterloo, Ontario, Canada.



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