

Piranha3 P3-S0-16Kx0 and P3-80-16K40

CMOS Line Scan Cameras



Key Features

- CMOS line scan
- 16k pixel resolution
- Line rates up to 72 kHz and 1,179 MPix/s throughput
- 100% fill factor
- Exposure control
- 100x antiblooming
- On-chip ADC
- HSLink or Camera Link interface

Programmability

- Can save up to four sets of flat-field correction coefficients
- 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 Piranha3 16k CMOS line scan camera delivers greater speed and more resolution than ever before.

The Piranha3 16k CMOS line scan camera raises resolution and speed to a new level. The 16k pixel resolution and fast 72 kHz maximum line rate is ideally suited for the inspection of large-area flat-panel displays and printed circuit boards.

With the Piranha3 16k camera you can experience more throughput than ever before in the same amount of time. Plus our new HSLink or Camera Link interface enables higher speeds and a simpler system design overall.

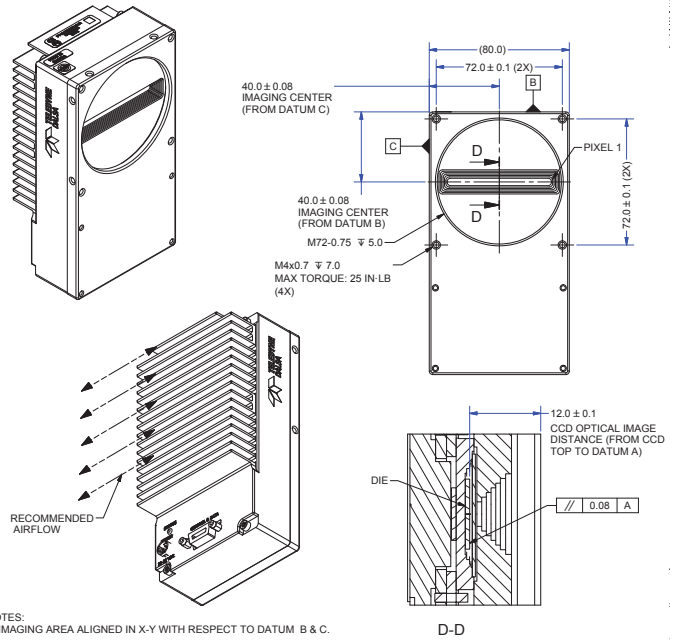
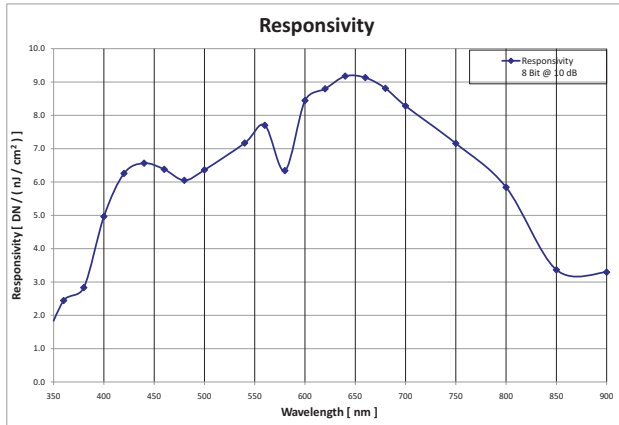
The Piranha3 cameras are our largest resolution and highest throughput line scan cameras.

Specifications

| | |
|-----------------------|---|
| Resolution | 16,384 pixels |
| Data Rate | 1,179 MPix/s (HSLink model) 680 Mpix/s (Camera Link model) |
| Line Rate | 72 kHz Max (HS Link model) 40 kHz Max (Camera Link model) |
| Pixel Size | 3.5 μm x 3.5 μm |
| Data Format | 8 bit, 10 bit, 12 bit (HSLink model) 8 bit, 10 bit (Camera Link model) |
| Output | HSLink / Camera Link |
| Lens Mount | M72 x 0.75 |
| Responsivity | 2.80 DN/(nJ/cm ²) broadband @ 0 dB, 8 bit |
| Dynamic Range | 65 dB |
| Nominal Gain Range | 0 dB to +20 dB |
| Size | 80 mm (W) x 150 mm (H) x 54 mm (D) |
| Mass | 800 g |
| Operating Temp | 0 °C to 50 °C, measured at the front plate |
| Power Supply | Hirose +12 V to +15 V DC |
| Power Dissipation | 20 W (HSLink model) 18 W (Camera Link model) |
| Regulatory Compliance | CE and RoHS |
| Control | HSLink / Camera Link |
| Data | Shared with Control |
| Part Number | P3-S0-16K40-00-R (HSLink model) P3-80-16K40-00-R (Camera Link model) |

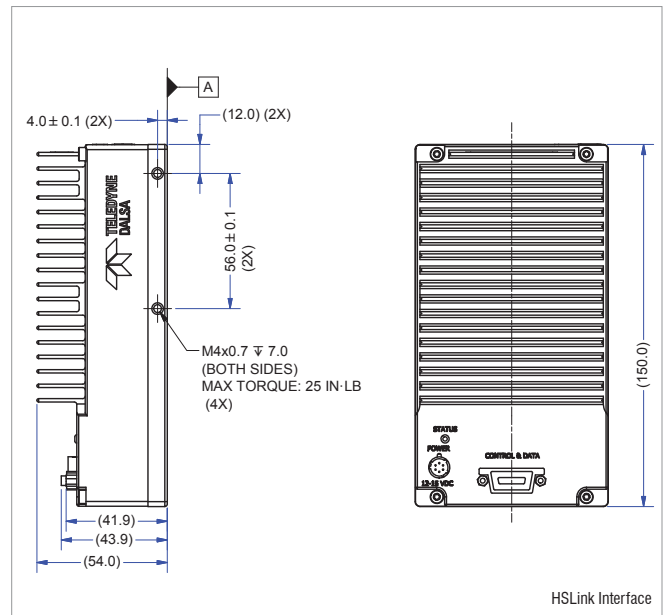
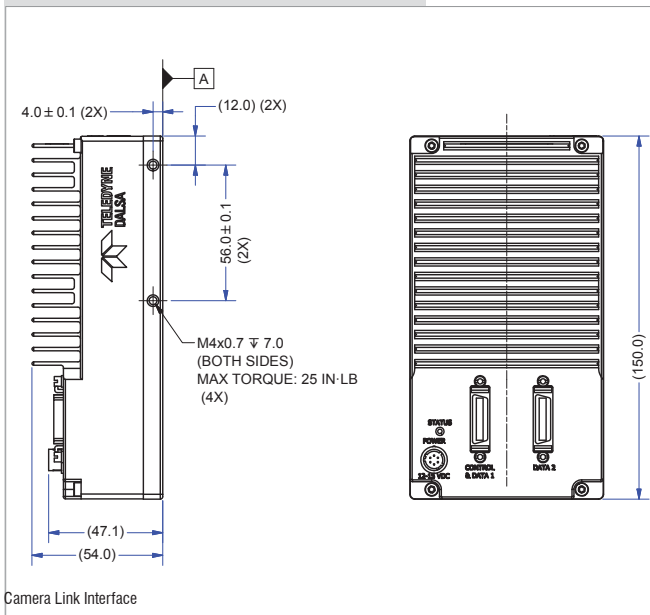
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- NOTES:
- 1) IMAGING AREA ALIGNED IN X-Y WITH RESPECT TO DATUM B & C.
 - 2) ROTATION OF THE CCD IMAGING AREA IS $\pm 0.6^\circ$.
 - 3) LENS MOUNT POSITION WITH RESPECT TO IMAGING AREA: X-Y ± 0.175 MM.

units: mm



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