Piranha HS HS-40-04K40

High Sensitivity Line Scan Cameras



Key Features

- Line rate of 36 kHz
- 160 megapixels per second throughput
- Responsivity up to 1170 DN/(nJ/cm²)
- Bidirectional
- Antiblooming
- Configurable Base or Medium Camera Link

Programmability

- Can save up to four sets of flat field correction coefficients
- Stage selectability up to 96 stages
- Selectable area mode of operation for ease of alignment
- Mirroring and forward/reverse control
- Programmable pixel to pixel correction

Typical Applications

- Postal Sorting (flats)
- Flat Panel Display Inspection
- Printed Circuit Board Inspection
- Web inspection
- Low light applications

Overview

4k of resolution and 100X greater responsivity than traditional line scan cameras

The Piranha HS-40-04K40 camera is a member of DALSA's latest high sensitivity, TDI based camera family. The Piranha HS-40-04K40 camera operates with a maximum line rate of 36 kHz and a throughput of 160 megapixels per second.

Camera configuration is extremely flexible and the number of TDI stages, Camera Link taps, throughput, and line rate are all software controllable. The camera is capable of bidirectionality, can store up to four sets of pixel coefficients and the selectable area mode of operation facilitates camera alignment.

The high level of sensitivity—up to 1170 DN/(nJ/cm²)— is accomplished using TDI technology with up to 96 stages of exposure, while the camera's antiblooming prevents localized overexposure from contaminating the information in adjacent pixels.

Specifications

Resolution 4096 x 96 TDI

Data Rate 160 megapixels/second, selectable

Max. Line/Frame Rate 36 kHz Pixel Size $7 \mu m$ Data Format 8 , 12 bit

Output Base, Med Camera Link
Lens Mount M42 x 1, F mount

Responsivity 1170 DN/(nJ/cm²)broadband,8 bit,10 dB

Dynamic Range 63 dB Nominal Gain Range ±10 dB

Size 85 mm x 85 mm x 55.4 mm

 $\begin{array}{ll} \text{Mass} & < 500 \text{ g} \\ \text{Operating Temp} & 0 \,^{\circ}\text{C to } 50 \,^{\circ}\text{C} \\ \text{Power Supply} & 12 \,\text{V to } 15 \,\text{V} \\ \text{Power Dissipation} & < 10 \,\text{W} \\ \end{array}$

Regulatory Compliance
Control
Data
Power
Example Part Number

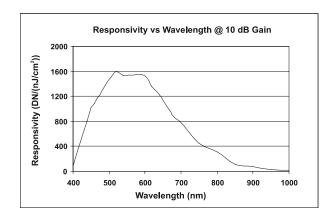
CE and RoHS (pending)
MDR26 Camera Link
Shared with Control
Hirose HR10 6 pin
HS-40-04k40



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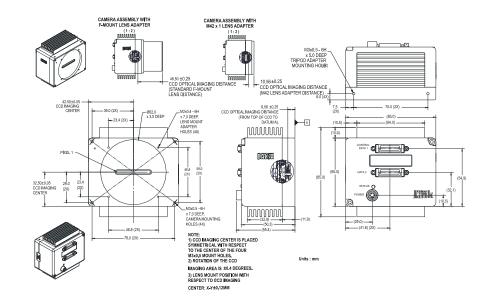
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This High Sensitivity Line Scan camera uses TDI technology to maximize photon capture at high line rates. With fast data rates and a large number of pixels, this camera inspects and detects with unrivalled precision and speed.









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