

# 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/cm<sup>2</sup>)
- 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/cm<sup>2</sup>)—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 μm
Data Format	8 , 12 bit
Output	Base, Med Camera Link
Lens Mount	M42 x 1, F mount
Responsivity	1170 DN/(nJ/cm <sup>2</sup> )broadband, 8 bit, 10 dB
Dynamic Range	63 dB
Nominal Gain Range	±10 dB
Size	85 mm x 85 mm x 55.4 mm
Mass	< 500 g
Operating Temp	0 °C to 50 °C
Power Supply	12 V to 15 V
Power Dissipation	< 10 W
Regulatory Compliance	CE and RoHS (pending)
Control	MDR26 Camera Link
Data	Shared with Control
Power	Hirose HR10 6 pin
Example Part Number	HS-40-04k40



# Piranha HS HS-40-04K40

High Sensitivity Line Scan Cameras

*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.*

