

# Piranha HS HS-4x-02K30

High Sensitivity Line Scan Cameras



## Key Features

- Line rate up to 52 kHz
- High responsivity up to 1610 DN/(nJ/cm<sup>2</sup>)
- Selectable Base or Medium Camera Link™
- Enhanced blue response
- 100% fill factor
- >100x Antiblooming

## Programmability

- Programmable pixel to pixel correction
- User selectable number of TDI stages
- -10 dB to +10 dB selectable gain
- 8 or 10 bit output
- Analog and digital gain and offset control
- Adjustable integration time and line rate

## Typical Applications

- Postal sorting (letters)
- High performance document scanning and image lift
- Industrial inspection
- Low light scanning

## Overview

# High Sensitivity. High Speed. Low Noise.

With line rates exceeding 52 kHz and a resolution of 2048 pixels, DALSA's latest high sensitivity camera specifically meets the performance requirements needed in demanding applications such as postal sorting, document scanning, and low light industrial inspection. The fast line rates are achieved via the sensors 4 outputs, each operating at 30 MHz, for a total throughput of 120 MHz. The high level of sensitivity—up to 1610 DN/(nJ/cm<sup>2</sup>)—is accomplished using TDI technology with up to 64 stages of exposure, while the camera's antiblooming prevents localized overexposure from contaminating the information in adjacent pixels. The unique features of the Piranha HS 2k will help you set your system apart from the competition.

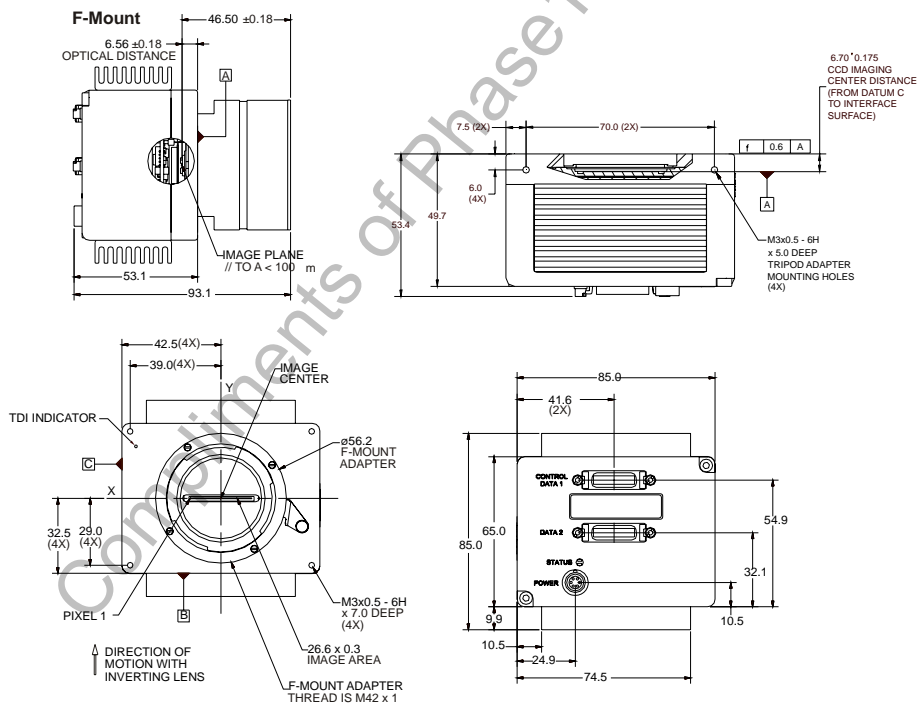
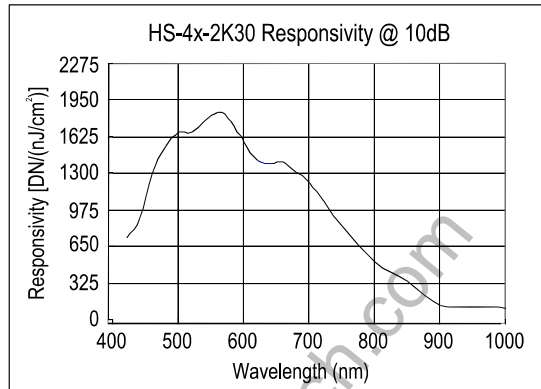
## Specifications

Resolution	2048 x 64 TDI
Data Rate	2 x 60 / 4 x 30 MHz
Max. Line/Frame Rate	52 kHz
Pixel Size	13 $\mu$ m
Data Format	8, 10 bit
Output	Base, Med Camera Link
Lens Mount	M42 x 1, F mount
Responsivity	Up to 1610 DN/(nJ/cm <sup>2</sup> )
Dynamic Range	54 dB
Nominal Gain Range	$\pm$ 10 dB
Size	85 mm x 85 mm x 53.4 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
Control	MDR26 Camera Link
Data	Shared with Control
Power	Hirose HR10 6 pin
Example Part Number	HS-41-02K30

# Piranha HS HS-4x-02K30

## High Sensitivity Line Scan Cameras

*This High Sensitivity Line Scan camera uses TDI technology to combine multiple exposures, dramatically increasing sensitivity and decreasing lighting requirements.*



1. UNITS: MM
2. TOLERANCES 0.3 ON ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED.

X, Y TOLERANCES ON IMAGE CENTER LOCATION WITH RESPECT TO:

1. F-MOUNT ADAPTER ±0.18 MM
2. FOUR M3 x 0.5 HOLES ±0.18 MM
3. DATUM SURFACES B & C ±0.18 MM

IMAGE ROTATION WITH RESPECT TO SURFACE B IS 0.6°

