Overview

4k resolution, 50X greater responsivity than traditional line scan cameras (110 kHz line rate)

The Piranha HS camera family represents DALSA's latest generation of high sensitivity, TDI based cameras. With a maximum line rate of 110 kHz and throughput up to 640 MHz, the Piranha HS HS-82-04Kx0 provides the fastest speed available in a TDI camera. Camera alignment is also made easier with the selectable area mode of operation. Camera configuration is extremely flexible and the number of Camera Link taps, throughput, and line rate are all software controllable. The camera is capable of bidirectionality with up to 48 stages of selectability, while preventing overexposure with antiblooming.

Specifications

- Resolution: 4096 x 48 TDI
- Data Rate: 320 / 640 megapixels/second
- Max. Line/Frame Rate: 110 kHz
- Pixel Size: 14 μm
- Data Format: 8, 12 bit
- Output: Med, Full Camera Link
- Lens Mount: M72 x 0.75
- Responsivity: 2300 DN/(nJ/cm²)broadband, 8 bit, 10 dB
- Dynamic Range: 56 dB
- Nominal Gain Range: ±10 dB
- Size: 150 mm x 80 mm x 65 mm
- Mass: <800 g
- Operating Temp: 0 °C to 50 °C
- Power Supply: 12 V to 15 V
- Power Dissipation: <20 W
- Regulatory Compliance: RoHS and CE (pending)
- Control: MDR26 Camera Link
- Data: Shared with Control
- Power: Hirose HR10 6 pin
- Example Part Number: HS-82-04Kx0

Key Features

- (110 kHz line rate)
- 4096 pixels x 48 TDI stages
- 320 / 640 megapixels/second
- Responsivity up to 2300 DN/(nJ/cm²)
- 15 second calibration time
- Bidirectional
- Antiblooming
- Configurable Medium or Full Camera Link

Programmability

- Stage selectability up to 48 stages
- Selectable area mode of operation for ease of alignment
- Up to four sets of flat field correction coefficients
- Mirroring and forward/reverse control
- Flat field corrections

Typical Applications

- Flat panel display inspection
- Postal sorting (flats)
- High performance document scanning
- Low light applications
- Large web applications
- High speed scanning
These High Sensitivity Line Scan cameras use TDI technology to maximize photon capture at these high line rates. With a line rate of 110 KHz and 4k resolution, these cameras inspect and detect with unrivalled precision and speed.