

Eclipse EC-11

High Sensitivity Line Scan Cameras



Overview

Don't be afraid of the dark.

Key Features

- 100x more responsive than standard line scan
- Bidirectional scanning
- Compact package, high speed output
- Single 12 V power supply
- 100% fill factor
- Periscope configuration available

Programmability

- Programmable pixel to pixel correction
- Selectable horizontal and vertical binning
- Selectable -8.5 dB to 9.5 dB gain
- Adjustable offset, line rates, data rates and trigger mode
- CCD direction control

Typical Applications

- Postal sorting (bar-code reading, address lift, cancellation mark detection)
- Web inspection
- Electronics and semiconductor manufacturing machine vision

Delivering 100x greater responsivity than standard line scan cameras, Eclipse represents a generational leap past the performance of today's benchmark line scan products.

Eclipse's tremendous responsivity allows for less expensive lighting (e.g. LED or fluorescent) and an increased depth of field because you can use a larger $f\#$ in the optics. Built-in processing for pixel-to-pixel FPN/PRNU correction can compensate for non-uniformities introduced by lighting and optics, reducing lighting and optics costs even further. 100% fill factor and 10 bit digitization (8 bit output) let Eclipse deliver crisp images not possible with traditional or line scan cameras. Its single 12 V power supply simplifies the interface. All of this in a compact design makes Eclipse an outstanding choice for advanced linescan applications.

Specifications

Resolution	512 / 1024 / 2048 x 96 TDI
Data Rate	40 MHz
Max. Line/Frame Rate	64.1 / 34.8 / 17.4 kHz
Pixel Size	13 μm
Data Format	8 bit
Lens Mount	C, F mount
Responsivity	Up to 5850 DN/(nJ/cm ²)
Dynamic Range	54 dB
Nominal Gain Range	-8.5 dB to +9.5 dB
Size	50 mm x 50 mm x 88 mm
Mass	<215 / <215 / <300 g
Operating Temp	0 °C to 50 °C
Power Supply	12 V to 15 V
Power Dissipation	<5.4 W
Regulatory Compliance	CE
Control	MDR36F
Data	Shared with Control
Power	Hirose HR10 6 pin
Example Part Number	EC-11-02K40

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This Advanced Line Scan camera uses TDI technology to combine multiple exposures, dramatically increasing sensitivity and decreasing lighting requirements. With programmable pixel-to-pixel correction, Eclipse provides the best images possible.

