

► **Supersensitive CameraLink linescan camera**

The Spyder3 CL is a highly responsive monochrome linescan camera that surpasses standard linescan cameras with 3x more responsivity and 2x the throughput rate. Using DALSA's patented "Dual Line Scan Sensor Technology", the camera offers unprecedented responsivity. The user can select between single line or dual line operating modes. In most applications the dual line mode can be used reducing the need for higher power, higher cost lighting or allowing the lens aperture to be stopped down (improving depth of field).

The Spyder3 CL is available with resolutions of 1024, 2048 and 4096 pixels. Data output via the CameraLink (Base) interface can be selected at either 40 or 80 MHz. Camera configuration such as flat field correction, gain, offset or diagnosis can also be handled via the CameraLink interface.

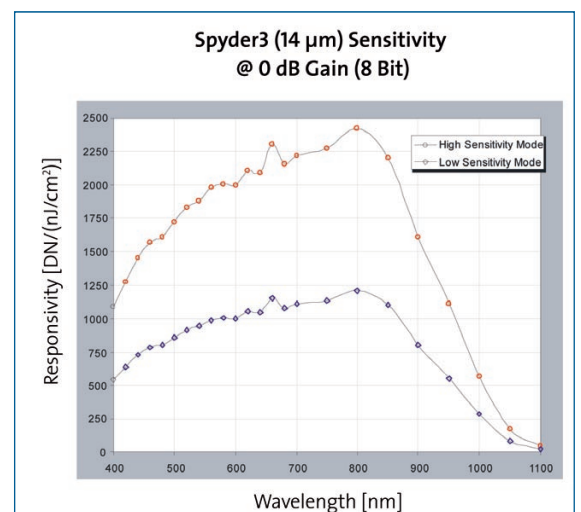


► **Examples of possible applications**

- Flat panel inspection
- Postal sorting
- Industrial metrology
- Print, food, web, material inspection
- Container inspection
- Pick & Place

► **Technical highlights**

- Line sensors available: 1024, 2048 and 4096 pixels
- Dual line sensor with dual or single line output
- 14 μm square pixels
- Maximum line rates 68 kHz (1k) and 36 kHz (2k)
- Maximum data rate 40 MHz or 80 MHz (pixelclock)
- Selectable video output: 8 or 12 bit
- Data transfer via CameraLink interface
- Very high responsivity up to 2064 DN (nJ/cm²) in high sensitivity mode
- Camera control functions set via CameraLink: integration time, line rate, gain, offset, bit depth, test pattern and diagnostics
- Flat field correction for compensation of image illumination inconsistencies
- Exact sensor alignment with minimal tolerances
- Power supply 12V to 15V / <7W

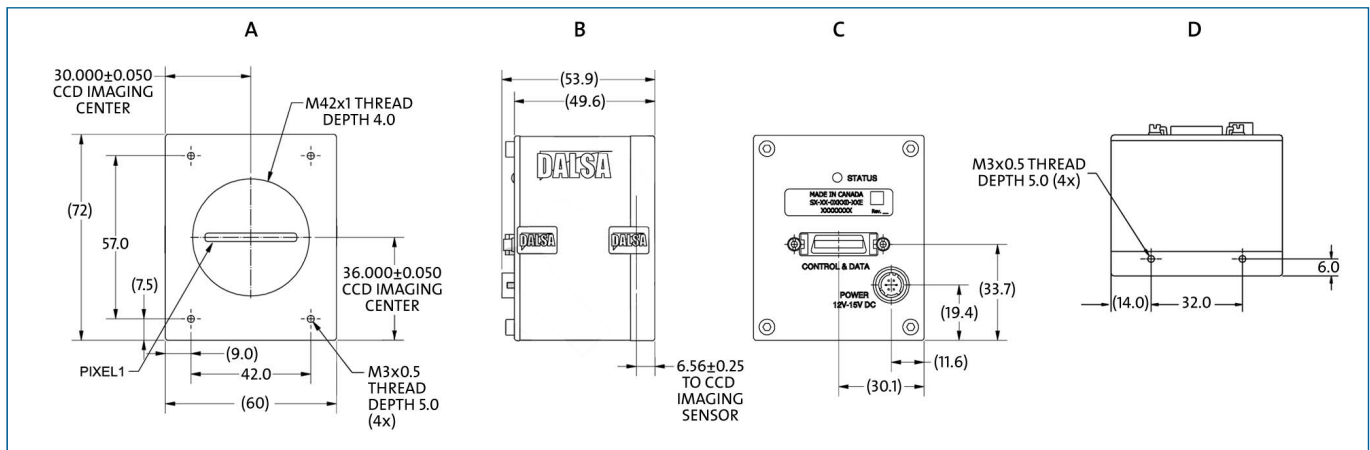




► Technical Data

Specification	DALSA S3-10-01K40	DALSA S3-20-01K40	DALSA S3-10-02K40	DALSA S3-20-02K40	DALSA S3-20-04K40
Camera class	Line scan camera, monochrome				
Sensor class	Dual Line-CCD				
Spectral response	400 - 1000 nm				
Fill factor	100 %				
Sensing area	14.3 x 0.028 (W x H in mm)	14.3 x 0.028 (W x H in mm)	28.7 x 0.028 (W x H in mm)	28.7 x 0.028 (W x H in mm)	41 x 0.02 (W x H in mm)
Resolution (effective)	1024 x 2 (H x V)	1024 x 2 (H x V)	2048 x 2 (H x V)	2048 x 2 (H x V)	4096 x 2 (H x V)
Pixel size	14 x 14 (W x H in μm)	14 x 14 (W x H in μm)	14 x 14 (W x H in μm)	14 x 14 (W x H in μm)	10 x 10 (W x H in μm)
Line frequency (max.)	36 kHz	68 kHz	18.5 kHz	36 kHz	18.5 kHz
Data rate	40 MHz				
Tap number (max.)	1	2	1	2	2
Sensitivity	2064 DN/(nJ/cm ²) @ 0 dB Gain (dual line, 12 bit)	2064 DN/(nJ/cm ²) @ 0 dB Gain (dual line, 12 bit)	2064 DN/(nJ/cm ²) @ 0 dB Gain (dual line, 12 bit)	2064 DN/(nJ/cm ²) @ 0 dB Gain (dual line, 12 bit)	1032 DN/(nJ/cm ²) @ 0 dB Gain (dual line, 12 bit)
S/N ratio	50.2 dB (@ 0 dB (dual line, 12 bit))	50.2 dB (@ 0 dB (dual line, 12 bit))	50.2 dB (@ 0 dB (dual line, 12 bit))	50.2 dB (@ 0 dB (dual line, 12 bit))	44.7 dB (@ 0 dB (dual line, 12 bit))
Bit per pixel	8 / 12 bit selectable				
Digital interface	CameraLink-Base				
Supply voltage	+12 - +15 V DC				
Power consumption	<5 W	<5 W	<5 W	<5 W	<7 W
Control interface	Remote Control via CameraLink interface				
Connectors	MDR-26, Hirose (6 pins)				
Features	Flat Field Correction, Anti Blooming				
Lens mount	M42x1, C-Mount, F-Mount	M42x1, C-Mount, F-Mount	M42x1, F-Mount	M42x1, F-Mount	F-Mount, M72x0.75
Dimensions	60 x 72 x 54 (W x H x L in mm)	60 x 72 x 54 (W x H x L in mm)	60 x 72 x 54 (W x H x L in mm)	60 x 72 x 54 (W x H x L in mm)	65 x 85 x 54 (W x H x L in mm)
Weight	<300 g				
Operating temperature	0 - 50 °C				
Regulations	CE, RoHS				

► Dimensions



Dimensions of the 1k, 2k model: Front view (A), side view (B), rear view (C), top view (D), all dimensions in mm

WWW.STEMMER-IMAGING.COM • IMAGING IS OUR PASSION

GERMANY
Phone: +49 89 80902-0
info@stemmer-imaging.de

UNITED KINGDOM
Phone: +44 1252 780000
info@stemmer-imaging.co.uk

FRANCE
Phone: +33 1 45069560
info@stemmer-imaging.fr

SWITZERLAND
Phone: +41 55 4159090
info@stemmer-imaging.ch

