

HIGH SPEED HIGH SENSITIVITY LINEAR CAMERAS FOR MACHINE VISION

MODULES AND OPTICAL RECEIVERS ■

SmartBlue™ Linear Camera



CCD Linear Cameras – SmartBlue™ Linear Camera

Applications

- High speed machine vision
- Postal / parcel sorting
- Web inspection
- Surface inspection
- OCR / barcode reading web inspection

Features and Benefits

- High speed, up to 80 MHz data rate.
- 14 μm square pixels in 512, 1024, 2048 or 4096 element resolutions.
- Small size 101.6 x 57.2 x 38.1 mm
- 8/10/12-bit output format
- High line rates up to 68 kHz
- 66 db dynamic range
- High sensitivity pinned photodiode CCD sensor
- CameraLink™ base output
- User controlled smart pixel correction
- Antiblooming control
- Single 12VDC power supply
- Electronic exposure control
- Adjustable gain levels
- Real time status LEDs
- Ultra-low image lag
- Square pixels with 100% fill factor
- Extended spectral range – 200 – 1000 nm

Product Description

The SmartBlue™ digital linescan cameras incorporate the latest in photodiode array technology based on the industry standard Reticon® devices with state of the art electronics and a robust industrial camera housing. The linescan photodiode array is a pinned photodiode Charge Couple Device which allows for high sensitivity, fast readout, while maintaining high dynamic range, and low image lag. The SmartBlue™ cameras are cost effective high-performance digital linescan cameras, and feature a CameraLink™ digital interface. These cameras feature geometrically precise photodiode CCD image sensor with 14 μm square pixels with resolutions of 512, 1024, 2048 and 4096 pixels. This “next generation” array can achieve data rates up to 80 MHz with superior noise immunity, precise linearity, and high CTE. The SmartBlue™ digital cameras are designed for high line rate applications with low to moderate light conditions and where small size, and low cost are required.

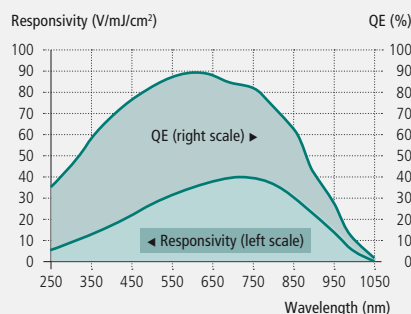
Technical Specification

SmartBlue™ Linear Camera

| Part Number | Resolution | Window | Aperture Length | Max. Line Rate |
|---------------|------------|--------|-----------------|----------------|
| SB0440CLG-011 | 512 | Glass | 7.2 mm | 68 kHz |
| SB0440CLQ-011 | 512 | Quartz | 7.2 mm | 68 kHz |
| SB1440CLG-011 | 1024 | Glass | 14.4 mm | 36.4 kHz |
| SB1440CLQ-011 | 1024 | Quartz | 14.4 mm | 36.4 kHz |
| SB2480CLG-011 | 2048 | Glass | 28.7 mm | 37.3 kHz |
| SB2480CLQ-011 | 2048 | Quartz | 28.7 mm | 37.3 kHz |
| SB4480CLG-011 | 4096 | Glass | 57.3 mm | 19.1 kHz |
| SB4480CLQ-011 | 4096 | Quartz | 57.3 mm | 19.1 kHz |

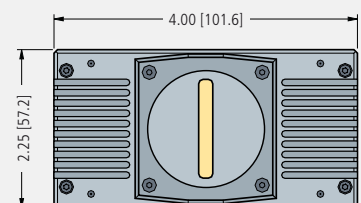
Technical Specification

Spectral Sensitivity Curve (1x Gain)



Technical Specification

Package Drawing*



* not for SB4480CLX