

16,384 Pixels, 40kHz Scan rate, Camera Link compliant

DIGITAL LINESCAN CAMERA

TL-16KACL



(Lens optional)

Overview

- The TL-16KACL inherits the specifications of the conventional model TL-16000CL, and has additional specifications the binning mode and the switching function of clock speed.
- Approximately twice the sensitivity is achieved by the vertical binning function.
- Since the configuration of the Camera Link (Base /Full Configuration) and clock speed(85/80/40MHz) are selectable, this camera can be set to a suitable video output format for the system.
Since this model inherits the external dimensions and other specifications of the conventional model, it is easy to replace.
- Industrial digital Line scan camera equipped with a CMOS image sensor which has linearly arranged 16,000 photodiodes.
- High-resolution and High-speed CMOS Line Scan Camera featuring 16,384 image pixels, 40/35 kHz scan rate and 640 MHz data rate.

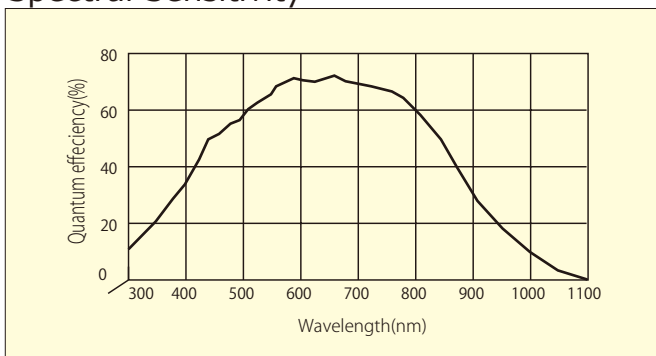
Features

- Since various models of capture boards from board manufacturers can be connected, it is easy to get high-precision images from the camera.
- 3.5μm square pixel size provides high-definition images.
- Equipped with Global shutter function and FFC function.
- Anti-blooming function is incorporated.
- Clear image data is obtained by the small difference of the characteristics of the odd and even-numbered pixels.
- Dark current correction circuit helps to obtain stable images even when the ambient temperature changes.
- DC 12V single power operation.
- Reduction in size and weight is achieved by original design.

Applications

- LCD panel inspection equipment applications
- Image processing device for image inspection
- Measuring equipment such as appearance inspection device or dimensional measurement device
- Surface inspection device for sheet-like object
- High-resolution pattern inspection instrument
- Data entry device for image processing unit employing computer

Spectral Sensitivity



Specifications

Image sensor	Global shutter CMOS
Number of pixels	16384
Pixel size	3.5μm × 3.5μm
Photo array length	57.344 mm
Scan rate (Data rate)	Full 40kHz (85MHz×8TAP) Full 35kHz (80MHz×8TAP) Full 17.5kHz (40MHz×8TAP)
Line transfer pulse input	25μsec (Min)
Video output (Digital output)	8Bit Full Configuration
Sensitivity	gain1=1.2, gain2=4.8 DN/nJ/cm2
Saturation exposure	23 ke-(typical value)
Dynamic range	60dB (on the element)
Output uniformity	10% standard at 50% of saturation output
Power supply	+12V±0.5V (0.6A or less)
Operational ambient temperature	0°C to +40
Operational humidity range	85 % Max
Storage temperature range	-10°C to +65°C
Weight	720g or less
External dimension	100 (W) × 100 (H) × 34 (D)mm
Lens mount	M72, P=0.75mm
Additional function	FFC compensation Vertical binning , averaging Switchable clock speed

