

4,096Pixel, Dual line Bayer format color CMOS, 80kHz scan rate,

DIGITAL COLOR LINESCAN CAMERA TLC-4K7ACL



(Lens optional)

Applications

- Input device for visual inspection systems using image processing.
- Input device for visual inspection systems that require color images.
- Input device for visual inspection systems for the surfaces of sheet-like objects.
- Input device for high-resolution pattern inspection instruments.
- Besides, input device for various image processing using a computer.

Specifications

Image sensor	CMOS(Bayer)
Number of pixels	4096 x 2line
Pixel size	7 μm x 7 μm
Photo array length	28.672mm
Scan rate (Data rate)	80kHz (85MHz x 8TAP) 75kHz (80MHz x 8TAP) 47kHz (50MHz x 8TAP) 40kHz (85MHz x 4TAP) 38kHz (80MHz x 4TAP) 24kHz (50MHz x 4TAP) 20kHz (85MHz x 2TAP) 19kHz (80MHz x 2TAP) 12kHz (50MHz x 2TAP)
Video output (Digital output)	8bit Full Configuration 8bit · 10bit Medium/Base Configuration
Saturation exposure	40ke-(typical value)
Dynamic range	60dB(on the element)
Output ununiformity	10% standard at 50% of saturation output (on the element)
Power supply	+12V ±0.5V (0.5A or less)
Operational ambient	0°C~+40°C
Operational humidity range	85% MAX
Storage temperature range	-10°C~+65°C
External dimension	80(W)×100(H)×60.4(D)mm
Weight	500 g or less
Lens mount	F
Connectors	Power Input HR10A-7R-6P(Hirose) Digital output Camera Link (MDR)

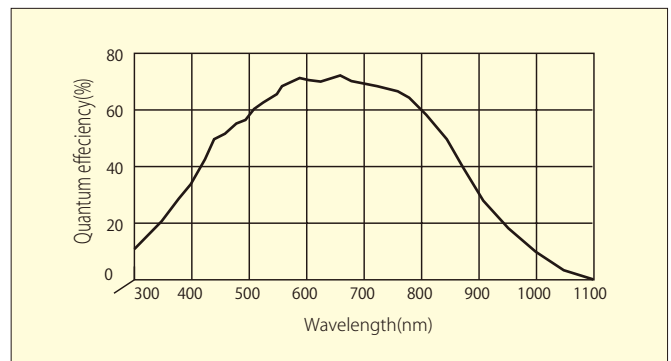
Overview

- Industrial digital line scan camera equipped with a CMOS image sensor which has two lines of 4,096 photodiodes arranged on a straight line.
- Since the configuration of the Camera Link (Base /Medium /Full Configuration) and clock speed(85/80/50MHz) are selectable, this camera can be set to the most suitable video output from the various combinations for the system.
- High sensitive and high speed CMOS Line Scan Camera with 4,096 pixel resolution, 80 kHz highest speed and 680 MHz maximum data rate.

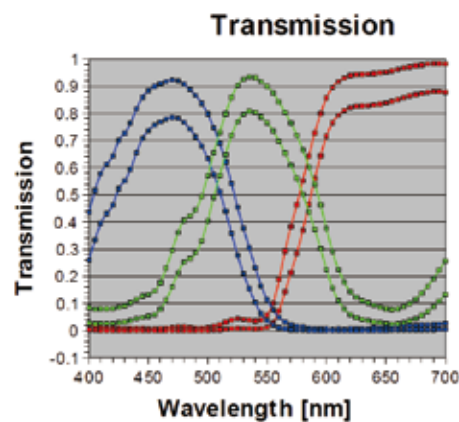
Features

- Higher speed image capturing by reading out two lines at one scan.
- The large unit cell size of 7 μm provides high S/N.
- Equipped with Global shutter and FFC function.
- By the Bayer color format, gap correction is not necessary.
- DC12V single power operation.

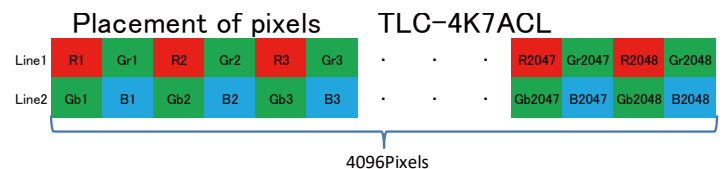
Spectral Sensitivity



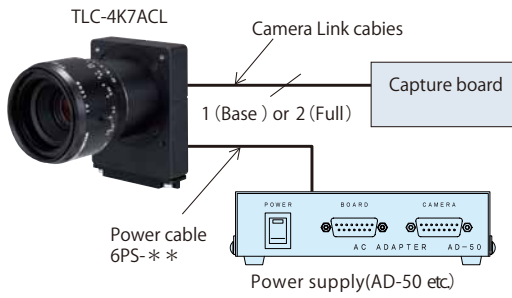
Transmittance of the color filter



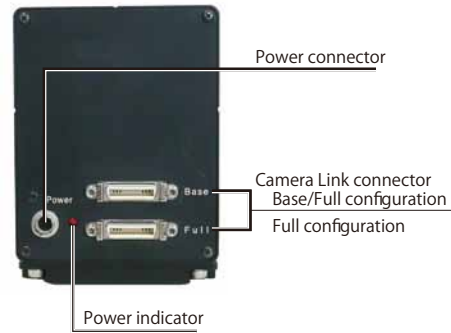
This figure indicates the transmittance of the color filter on the sensor



Configuration Diagram



Back panel



※All items are sold separately except for camera

Example of option Items

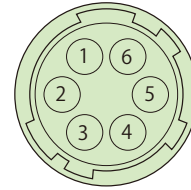


- Power supply unit AD-50
- Power cable 6PS-03 (3m)
- Camera Link cables 14B26-SZLB-500-0LC (5m)×2 pcs,



- Lens FL-YFL5028
- Camera mount IB-25

Connectors

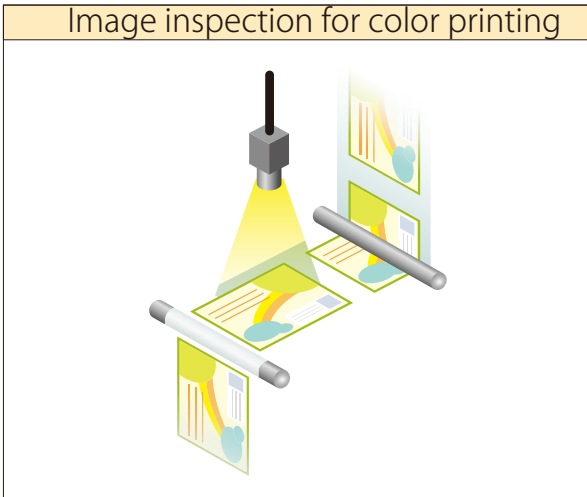


●Power connector (HR 10A-7R-6P)

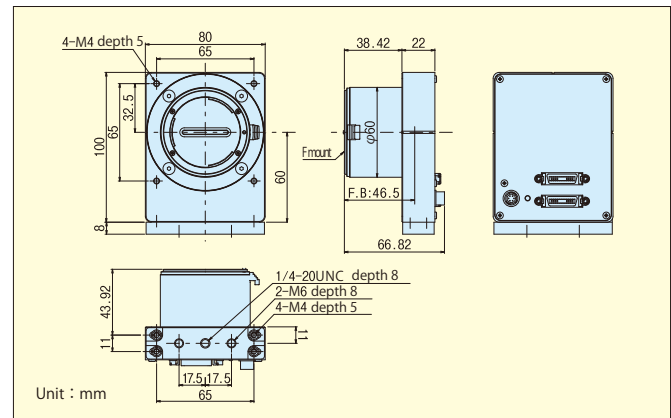
Pin No.	Signal name	Pin No.	Signal name
1	+ 1 2 V	4	GND
2	+ 1 2 V	5	GND
3	+ 1 2 V	6	GND

Pins 1, 2 and 3 are connected internally

Image inspection for color printing



Dimensional Outline Drawing



●It may be changed without a notice about all items (product name, a model, specifications, external form dimensions, materials, the price) explained by this catalogue.
 ●We do not take responsibility about any accident damage by an error in the use of deficiency in the construction and deficiency of the maintenance check and this product, the natural disaster (surge, including lightning-induced).

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