

7400 Pixels, FFC featured, Camera Link compliant

DIGITAL LINESCAN CAMERA

TL-7400FCL



(Lens: optional)

Overview

- The TL-7400FCL is an industrial line scan camera equipped with CMOS image sensor which has linearly arranged 7,400 photodiodes.
- High-speed and high-resolution CCD Line scanner with CCD image sensor featuring 7400 pixels and 12.7kHz scan rate.
- Outputs in 2 × 8/10 bit digital data format complying with the Camera Link standard. (Base configuration)
- Gain, offset and output format (8/10 bit) can be controlled by the communication command (RS232C) from the capture board.

Specifications

TYPE	TL-7400FCL
Number of pixels	7,400
Pixel size	4.7μm×4.7μm
Photo array length	34.8mm
Data rate	100MHz (MAX)
Scan rate	12.71kHz
Line transfer pulse input	79μsec (MIN) 100Ωterminating
Video output (Digital output)	Base Configuration 2×8/10bit
Sensitivity	50V/lx.sec
Saturation exposure	0.13 lx.sec (on the element)
Dynamic range	2000(Typ. On the sensor spec.)
Output uniformity	3 % standard at 50 % of saturation output (on the element)
Power supply	+12V±0.5V (600mA)
Operational ambient temperature	0~+40℃
Operational humidity range	85%MAX
Storage teperature range	-10℃~+65℃
Weight	360g or less
External dimension	64(W)×64(H)×80.3(D)
Lens mount	F mount (Standard) K mount (Optional)

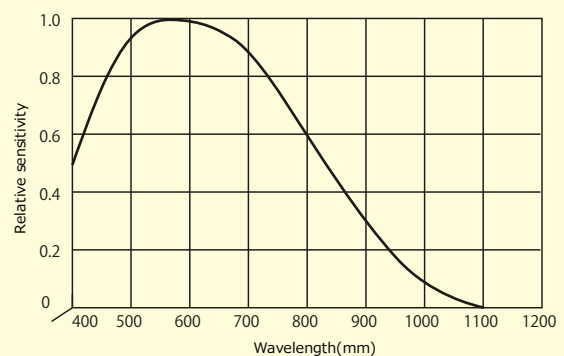
Features

- FFC function is installed. (FFC: Flat Feld Correction is a function to coordinate the wave pattern irregularity with a lens and the sensor element flatly.)
- Since various models of capture boards from board manufacturers can be connected, it is easy to get high-precision images from the camera.
- Simplified exposure control feature provides the output of the constant image level against fluctuations of the period of the external rotary encoder signal. (At the scan rate lower than 6.3 kHz)
- DC 12V single power operation.
- Small and lightweight.

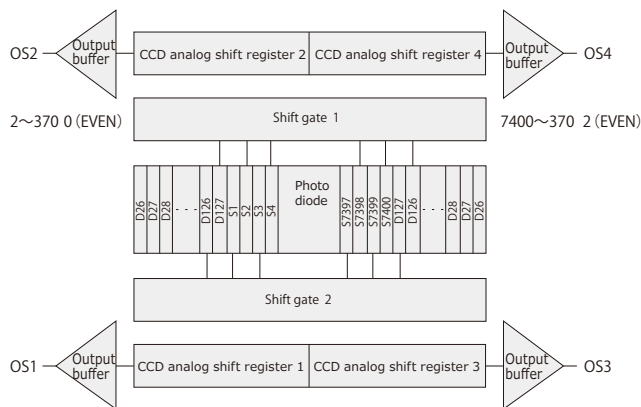
Applications

- Inspection equipment for liquid crystal panel
- 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

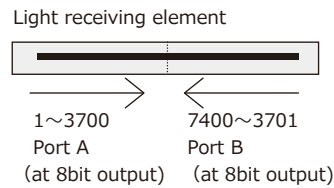
Spectral Sensitivity



Block Diagram of Image sensor

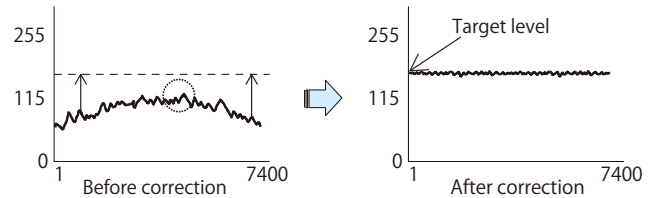


Scanning direction

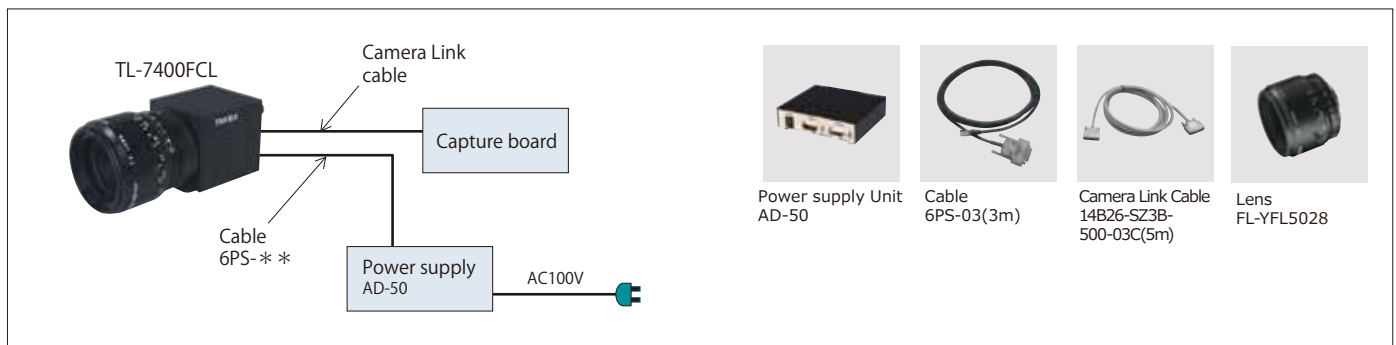


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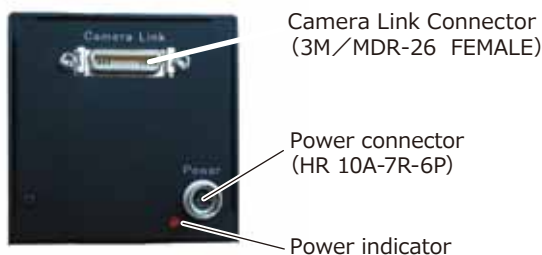
Configuration Diagram



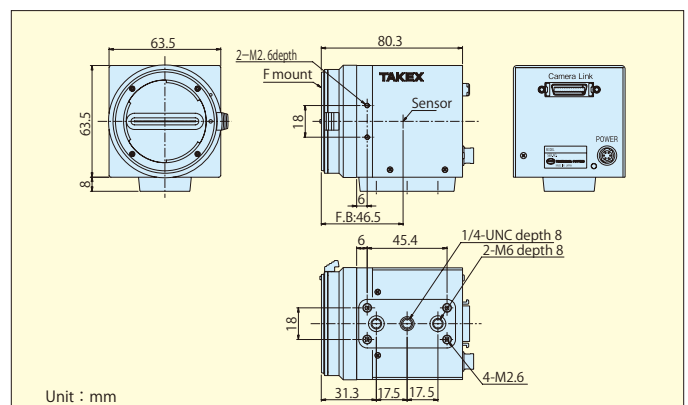
Example of option Items (Sold separately)



Back panel



Dimensional Outline Drawing



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