

# S4 系列 Camera Link 彩色/黑白线扫描CCD工业相机

## S4 Series Camera Link Color / BW Line Scan CCD Cameras



### 产品简介 (Overview)

## 自动白平衡、像场校正、空间校正

### Auto White Balance, Shading Correction, Space Correction

最新设计的S4系列彩色/黑白线扫描CCD工业相机在原有S1系列产品成功的基础上，融合了最新的嵌入式DSP设计技术，提供了自动白平衡、像场校正、空间色彩校正等一系列令人振奋的新功能，大幅度简化了应用后处理流程。

S4系列产品覆盖了2K-10K像素多种高性能三线阵彩色线扫描CCD，产品采用Base/Medium Camera Link标准接口，简易和直观的串行相机通讯和配置可与各类标准Camera Link图像卡兼容。该系列产品性能优异，可靠性高，尤其适用于色选行业、工业表面检测、图像扫描应用等领域。

The brand new S4 series tri-linear color / mono camera link line scan CCD cameras are functional upgrade of our success of S1 series. The S4 series covers tri-linear CCD resolution from 2K pixels to 10K pixels, it offers superb image quality and some exciting functions like auto white-balance setting, shading or flat-field correction, and space correction for tri-linear scan image.

The flat and robust construction type of S4 series make it more efficient in heat-sinking which can meet most harsh industrial environments, these advantage of the series makes the camera suitable for large range of applications.

### 产品特性 (Features)

- 2048-10656有效像素 (2K - 10K resolution);
- 三线彩色/黑白CCD (Tri-linear / Mono CCD);
- Camera Link Base/Medium接口 (Camera Link Base/Medium output);
- 10bit / 8bit输出输出 (10bit / 8bit data format);
- 自动白平衡设定 (Auto white balance);
- 像场校正 (Shading / Flat-field Correction);
- 空间色彩校正 (Space Correction for Tri-Linear CCD image);
- 单12V电源供电 (Single DC 12V power supply);
- 串行相机配置 (Flexible serial control);
- 多种镜头接口 (Variable lens mount available);
- 触发及同步功能 (Ext. trig / sync.);

### 典型应用 (Typical Applications)

- 色选应用 (Sorting Machines);
- 表面缺陷检测 (Web inspection);
- 自动光学检测 (AOI);
- 智能交通 (Intelligent traffic systems);
- 图像扫描应用 (Document scanning and imaging);
- 通用机器视觉 (General machine vision);

### 产品规格 (Specifications)

分辨率 (Resolution)	2048 / 5376 / 7424 / 10656
像素尺寸 (Pixel Size)	2K - 14 $\mu$ m / 5K - 7 $\mu$ m / 7K - 4.7 $\mu$ m / 10K - 2.625 $\mu$ m
数据格式 (Data Format)	10bit / 8bit $\times$ 3Taps RGB, 10bit 8bit $\times$ 2Taps Mono
输出 (Output)	1T24 RGB / 1T30 RGB / 2T10 / 2T8
增益调整范围 (Gain)	1x - 10x Analog Gain, 8bit Range
偏置调整范围 (Offset)	$\pm$ 51 LSB (10bit Data), 11bit Range
镜头接口 (Lens Mount)	F-Mount / M42 $\times$ 1 Screw Mount
电源 (Power Supply)	DC 12V Input, <9W Power Disipation
工作温度 (Operating Temp.)	0 to 50
尺寸 (Dimension)	100mm(W) $\times$ 150mm(L) $\times$ 30mm(D)
重量 (Mass)	<800g (With F-mount Lens Adapter)
电源输入 (Power Connector)	HR10A type 4-pin Connector
数据 (Data Connector)	2 $\times$ MDR26 Camera Link
相机控制 (Camera Control)	Shared with Data (CC1, CC2)

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#### 型号列表 (Order Info)

型号 Order Number	有效像素 Resolution	类型 CCD Type	像素尺寸 Pixel Size (μm)	数据率 Data Rate	最高行频 Max Line Rate	接口类型 Interface	数据格式 Data Format	其它功能 Extra Functions
S4-02K90C-CL	2048	Tri-Linear	14	3×30MHz	10.5KHz	Base/Medium CL	1T24/1T30	—
S4-05KA8C-CL	5376	Tri-Linear	7	3×60MHz	10.5KHz	Base/Medium CL	1T24/1T30	—
S4-07KA8C-CL	7424	Tri-Linear	4.7	3×60MHz	7.8KHz	Base/Medium CL	1T24/1T30	—
S4-10K60C-CL	10656	Tri-Linear	2.625×8.4	3×20MHz	1.8KHz	Base/Medium CL	1T24/1T30	—
S4-07KA0M-CL	7392	Mono	4.7	2×50MHz	12.5KHz	Base CL	2T8/2T10	—

#### 尺寸 (Mechanical) 单位 (Unit): mm

