

LD2000 系列LVDS黑白线扫描CCD工业相机

LD2000 Series LVDS B/W Line Scan CCD Cameras



产品特性 (Features)

- 2048~7450有效像素 (2K~7.5K resolution);
- EIA-644 LVDS接口 (EIA-644 LVDS data interface);
- 40M像素/s输出频率 (High data rate up to 40MPixels/s);
- 小型化设计 (Compact design);
- RS-232相机配置 (Flexible RS-232 control);
- 多种镜头接口 (Variable lens mount available);
- 外同步功能 (Ext. sync.)

可编程性 (Programmability)

- 积分时间及行频设定 (Adjustable integration time and line rate);
- 数字增益及数字偏置调整 (Digital gain and offset control);
- 测试图像输出 (Test image output);
- 同步模式设置 (Internal/Ext. sync.);

典型应用 (Typical Applications)

- 玻璃表面缺陷检测 (Glass surface inspection);
- 电路板检测 (AOI electronics manufacturing);
- 色选机 (Sorting machines);
- 智能交通 (Intelligent traffic systems);
- 图像扫描应用 (Document scanning and imaging);
- 尺寸及振动测量 (High-speed metrology);
- 光谱探测与分析 (Spectral analysis);
- 科研及教学 (College & study);

产品简介 (Overview)

高性能、低成本、LVDS总线接口

High Performance, Low Cost, LVDS Interface

LD2000 黑白线扫描CCD工业相机系列产品覆盖了2048~7450像素线扫描CCD传感器，可与我公司生产的LVPCI系列高速数据采集卡完全兼容。LD2000 系列相机内部集成了高性能的AFE模块及高精度的AD采样器，输出包含了8bit/12bit各种型号，用户可通过标准的RS-232接口及简单易用的Windows配置软件进行相机工作模式、积分时间调整、增益和偏置调整；外同步输入则可进行多相机并行工作设置，具有高稳定性、高可靠性和高性价比的优点，尤其适用于表面检测、图像扫描等工业现场应用。

The LD2000 series line scan cameras offers superb image sensing quality, versatility and easy implementation. This series of products, has a compact mechanical design and incorporates monochrome or color linear sensors from 2048 to 7450 pixels, fully compatible with our LVPCI series PCI frame grabber. The programmable settings via RS-232 let the user work at different integration time, gains and offsets. The external trigger enable synchronization of several cameras.

The performance and reliability of this series of products make it well-suited for most demanding industrial applications, from web inspection to document scanning, from surface inspection to metrology.

产品规格 (Specifications)

分辨率 (Resolution)	2048 / 7450
像素尺寸 (Pixel Size)	14×14 / 4.7×4.7 (μm×μm)
数据率 (Data Rate)	20MHz to 40MHz
最高行频 (MAX. Line Rate)	9.4KHz / 5.2KHz
数据格式 (Data Format)	8bit / 12bit
输出 (Output)	8bit Parallel LVDS
增益调整范围 (Gain Range)	0dB to 24dB with 10bit resolution
偏置调整范围 (Offset Range)	-300mV to +300mV with 8bit resolution
镜头接口 (Lens Mount)	F Type / K Type / M42×1 Type / C Type
电源 (Power Supply)	+12V/+5V dual power input
功耗 (Power Dissipation)	<3W
工作温度 (Operating Temp.)	0 to 50
尺寸 (Size)	60mm(W)×60mm(H)×40mm(L)
重量 (Mass)	<300g
电源输入 (Power Connector)	Hirose 4 pin compatible
数据 (Data Connector)	MDR26 LVDS
RS-232 (RS-232 Connector)	Hirose 3 pin compatible

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型号列表 (Order Info)

型号 Order Number	有效像素 Resolution	像素尺寸 Pixel Size ($\mu\text{m}\times\mu\text{m}$)	数据率 Data Rate	最高行频 MAX Line Rate	数据格式 Data Format	电源 Power Supply	传感器类型 Sensor Type
LD2112B-2048	2048	14 \times 14	20MHz	9.4KHz	12bit	+12V and +5V	B/W CCD
LD2108B-2048	2048	14 \times 14	20MHz	9.4KHz	8bit	+12V and +5V	B/W CCD
LD2208B-7450	7450	4.7 \times 4.7	40MHz	5.2KHz	8bit	+12V and +5V	B/W CCD

尺寸 (Mechanical) 单位 (Unit): mm

