

Acer **P** 1266



ColorBoost II

SmartFormat

EcoProjection

The P1266 provides the home entertainment and SMB/classroom presentation performance expected of much more expensive projectors. With optimized color performance via 2500 ANSI Lumens brightness and XGA resolution, the display is clear and vibrant. Other notable features include an HDMI™ port, a 6-segment color wheel with 3X rotation speed, support for both 4:3 displays and widescreens through Acer SmartFormat, and Acer ColorBoost II and EcoProjection technologies. All told, the P1266 offers a smart blend of high performance and great value.

Fantastic projection and value



acer

Feature highlights

Striking display

- Unique, elegant design
- Acer ColorBoost II technology
- XGA resolution
- 2500 Lumens brightness and 2000:1 contrast ratio
- DLP® system design

Earth-friendly functionality

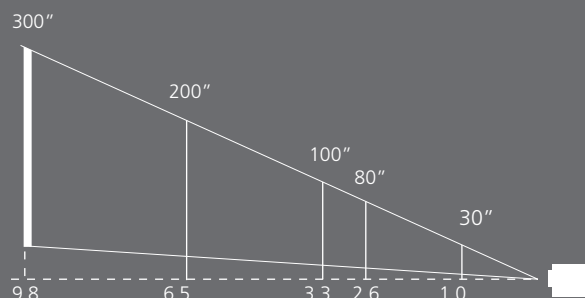
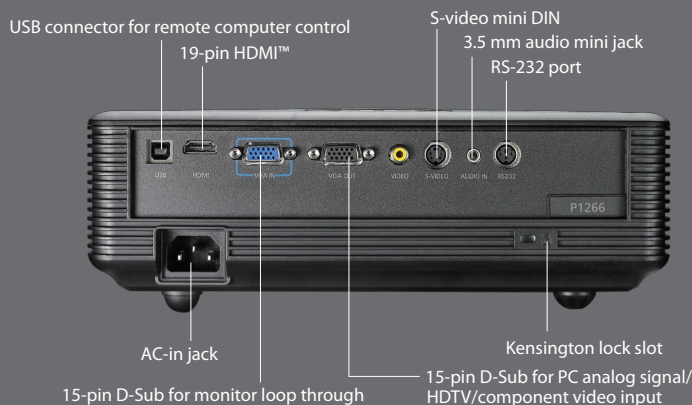
- Acer EcoProjection technology
- Longer lamp life (4000 hours)
- ECO mode
- Acer Instant Pack technology
- Automatic safety shutdown
- Digital zoom and pan
- 3X color-wheel rotation speed
- Low noise level
- Built-in speaker
- Alarm
- PIN security
- Windows Vista® compliance

Proficient, empowering usability

- Acer Empowering Technology
 - Acer ePower Management with High Altitude Mode
 - Acer eView Management with innovative Blackboard Mode
 - Acer eTimer Management
 - Acer eOpening Management
- Acer SmartFormat technology
- Installation menu
- Keystone correction (40° vertical)
- Quick start
- Quick signal detection
- Multi-PC connectivity
- Digital connectivity via an HDMI™ port
- Monitor loop-through
- RS-232 port

Acer Projector P1266 Quick Spec

Projection system	DLP®
Resolution	Native: XGA (800 x 600) Maximum: UXGA (1600 x 1200), WSXGA+ (1,680 x 1050)
Aspect ratio	4:3 (native), 16:9
Contrast ratio	2000:1
Displayable colors	134 million colors
Brightness	2500 ANSI Lumens
Projection distance	3.3 feet (1.0 m) ~ 32.0 feet (11.9 m)
Throw ratio	62 inches @ 2 m
Lamp type	Osram 180 w user replaceable P-VIP lamp
Lamp life	4000 hours
Keystone correction	±40 degrees (vertical)
Projection mode	Front, rear, front-ceiling, rear-ceiling
Ceiling mount capability	Yes
Weight	2.5 kg (5.5 lbs.)
Dimensions (W x H x D)	269 x 206 x 96 mm (8.8 x 6.7 x 3.1 inches)
Remote Control	IR remote control with laser pointer & PgUp/PgDn functions
Noise level	28 dBA



Acer Color Boost II Technology

Acer ColorBoost II optimizes multimedia performance for different scenarios, environments and connectivity interfaces. It is the next generation of ColorBoost performance enhancement technology for Acer projectors — all of which feature a six-segment color wheel for business presentations, educational purposes and entertainment in any venue. With Acer ColorBoost II, Acer projectors deliver enriched details, smoother gradation and brighter natural colors while boosting color strength and performance for more lifelike skin tones and unsurpassed color reproduction.

Acer SmartFormat Technology

Conveniently supports comprehensive wide-format PC signals. Users no longer need to worry about annoying "Signal not supported" issues, nor must they change the resolution of their wide-format notebook.

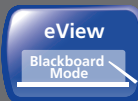
Acer EcoProjection Technology

Acer EcoProjection is a complete environment-friendly power management solution that reduces standby power consumption by up to 50%, from 10 W to 5 W. Also featured in the Acer EcoProjection suite is Acer ePower Management for customized power-saving configurations.



Acer ePower Management

Acer ePower Management provides quick configuration of power management options, including controls for High Altitude mode and Auto Shutdown.



Acer eView Management with Blackboard Mode

With Acer eView Management, adjusting projector settings to suit any environment and any type of content is fast and easy. Eight factory or user-defined presets instantly configure color, brightness and contrast to deliver best-quality images. Innovative Blackboard Mode allows users to instantly project onto a traditional green chalkboard. There is no longer a need to set up a separate white screen.



Acer eOpening Management

Acer eOpening Management allows users to easily create a customized startup screen for their Acer projector. Business users can set a corporate logo to create a professional brand image or add owner information to protect the projector from theft. Home users can have fun displaying their favorite photographs.



Acer eTimer Management

A digital clock that can be set by the user and displayed onscreen for convenient reference keeps presentations going at the right pace. Acer eTimer Management also features a visual countdown and alarm, or countdown alone, to warn the presenter when time is up.

About Acer

Since its founding in 1976, Acer has constantly pursued the goal of breaking the barriers between people and technology. Focused on marketing its brand-name IT products around the globe, Acer ranks as the world's No. 3 vendor for total PCs and No. 2 for notebooks, with the fastest growth among the top-five players. A profitable and sustainable Channel Business Model is instrumental to Acer's continued growth, while the successful mergers of Gateway and Packard Bell complete the company's global footprint by strengthening its presence in the U.S., and enhancing its strong position in Europe. Acer Inc. employs 5,000 people worldwide. 2007 revenues reached US\$14.07 billion. See www.acer.com for more information.

PL-B781F & PL-B782F FireWire
PL-B781G & PL-B782G Gigabit Ethernet
PL-B781U & PL-B782U USB 2.0

6.6 MP (2208 x 3000)
Monochrome & Color Cameras
5 fps Free Running - 5 fps Triggered

General Description

The **PL-B781 Monochrome** and **PL-B782 Color** cameras provide high resolution, low noise images for outstanding value in a broad range of industrial, security and life sciences applications. The camera features a 6.6 megapixel (2208 x 3000) resolution imager capable of 5 frames per second at full resolution. The PL-B781/782 series of cameras are based on a Cypress CMOS progressive scan sensor with a 1" optical format. Factory calibrated Digital Pixel Correction and on-board Flat Field Correction (FFC) provides image quality similar to CCD cameras but at a much more affordable price. These cameras provide the user of choice of 8-bit or 10-bit digitization and a dynamic range of 60 dB in 10-bit mode. The external hardware trigger and 2 general-purpose outputs ensure users have the flexibility to synchronize the camera with their processes and illumination.

You have the choice of a FireWire, Gigabit Ethernet or USB 2.0 interface, all of which eliminate the need for a frame grabber. PixelINK's industry leading SDK uses a common API for all cameras regardless of the chosen interface. Software code developed for one camera is easily transferred to other PixelINK models without the need to recompile code resulting in lower system costs and simplified integration.

The sensor architecture provides superior anti-blooming compared to CCD sensors making the PL-B781 & 782 an excellent choice for imaging highly reflective objects or scenes with intense illumination. The flexible Region of Interest (ROI) control allows users to operate at higher frame rates by placing a lower resolution "window" on the imager at any location. The camera can output 5 fps at 2048 x 1536 resolution, 16 fps at 1980 x 1020 resolution, 25 fps at 1280 x 1024 resolution and 89 fps at 640 x 480 (VGA) resolution. The window may be placed at any location on the imager with a granularity of 24 pixels x 24 pixels.

Why CMOS Sensor Technology?

CMOS sensor technology has made great strides in image quality over the past 5 years – to the point where performance levels are on par with many CCD sensors. The machine vision community continues to embrace CMOS technology due to its inherent strengths of low cost, low power consumption, high-speed, superior anti-blooming and the flexible ROI noted above.

Typical Applications

The PL-B781 & 782 cameras are suitable for a broad range of applications such as high performance security & surveillance applications, parts inspection, metrology, high resolution document archiving, PCB inspection and flat panel display inspection.



FireWire, Gigabit Ethernet & USB 2.0 Interfaces

We appreciate that OEMs and System Integrators are constantly looking for ways to reduce system costs and complexity. PixelINK has answered this call by offering three widely accepted interfaces all of which eliminate the need to purchase & integrate frame grabber boards and expensive custom cables.

IEEE 1394A – FireWire has proven itself as a reliable and robust interface over the past decade in machine vision applications. The deterministic communication provided by FireWire allows for precise timing in machine vision applications. PixelINK's FireWire cameras support the IIDC 1.31 specification making them compatible with a wide range of 3rd party DCAM software applications.

Gigabit Ethernet – 1,000 Mbit data rates, 100M cable lengths and networked connectivity have made the Gigabit Ethernet interface for machine vision, appropriately named GigEVision, the fastest growing interface over the past years. Transmission is provided via standard CAT5E or CAT6 cables.

USB 2.0 – Universality of this interface on host PCs is a major benefit for applications in the consumer end-user markets. Plug-and-play operation and low cost cabling makes USB 2.0 the leading user-friendly interface.

Customization

The products listed here are standard offerings. PixelINK also provides an extensive list of customized cameras to OEM customers around the world. If you can't find what you are looking for in the standard products, call us. We may already have what you need. If not, we can certainly design and build it for you.

FEATURES

Common API for all cameras
6.6 Megapixel resolution
Flexible ROI control
In-camera Flat Field Correction (FFC) &
Defective Pixel Correction

BENEFITS

Use existing code without recompiling. Saves development time and money.
High definition images provide over 21X resolution compared to VGA cameras
Users can increase frames up to 4000 fps with 24 pixel granularity
Provides superior image quality by correcting for non-uniform illumination, lens shading, and sensor Fixed Pattern Noise (FPN)

SENSOR

Sensor	Cypress CMOS
Type	CMOS Rolling Shutter
Resolution	2208(H) x 3000(V) Color & Mono
Pixel Pitch	3.5 µm x 3.5 µm
Active Area	7.73 mm x 10.5 mm - 13.1 mm diagonal
Peak QE	25 % (mono) 24 % (color)
Max Datarate	40 MHz

COMPUTER & OPERATING SYSTEM

Processor	2.0 GHz or better
Memory	512 MB min. 1 GB recommended
Operating System	Windows 2000, XP and Vista (32bit)
Hard Drive Space	75 MB

POWER REQUIREMENTS

Voltage Req.	FireWire/GigE 8-32 V DC - USB 5 V DC
Power Req. PL-B781	FireWire 3.6 W, USB 3.2 W, GigE 4.6 W
Power Req. PL-B782	FireWire 4.6 W, USB 4.0 W, GigE 5.6 W

ENVIROMENTAL & REGULATORY

Compliance	FCC Class B, CE & RoHS
Shock & Vibration	300 G & 20 G (10Hz - 2KHz)
Operating Temp.	0°C to 50°C (non-condensing)
Storage Temp.	-45°C to 85°C

SOFTWARE

PixeliNK Capture OEM	Free Download (www.pixelink.com)
DirectShow (exl. GigE)	Bundled with PixeliNK Capture OEM
TWAIN	Bundled with PixeliNK Capture OEM
SDK	API, sample code and LabVIEW wrappers
DCAM 1394 Compliance	IIDC version 1.31

CAMERA CONTROLS & FEATURES

Auto & Manual White Balance, Color Temperature, Gain, Brightness (Dark Offset), Gamma, Saturation, Region of Interest (ROI), Histogram, Binning, Averaging, Resampling, Image Flip & Rotate, Programmable LUT, In-Camera Defective Pixel & Color Correction, Callbacks (Image Filters), FFC (Gain & Offset).

FRAME RATES

Resolution	Free Running Mode	Triggered Mode
2208 x 3000	5	4.9
2048 x 1536	11	10
1920 x 1080	16	15
1280 x 1024	25	22
640 x 480	89	75

Frame rates will vary based on host system and configuration

Specifications are subject to change without notice

PERFORMANCE SPECIFICATIONS *

Responsivity	Mono 4.4 DN/(nJ/cm ²) Color 4 DN/(nJ/cm ²)
FPN	Mono <1 % Color <1.5 %
PRNU	Mono <2 % Color <3 %
Read Noise	<1 DN
Dynamic Range	60 dB
Bit Depth	8 & 10-bit
Color Data Formats	Bayer 8, Bayer 16 and YUV422
Mono Data Formats	Raw, Mono 8 and Mono 16
Exposure Range	63 µs to 2 seconds free running 63 µs to 2 seconds triggered
Gain	0 dB to 20.5 dB in 14 increments

*PL-B781 Settings: Typical values with 40ms integration time, 0dB gain, FFC on, 10-bit mode

*PL-B782 Settings: Typical values with 100ms integration time, 0dB gain, FFC on, 10-bit mode

MECHANICALS

Dimensions	102 x 50 x 41 mm (straight) 110 x 50 x 41 mm (right angle)
Weight	Straight: 210 g - Right Angle: 264 g
Mounting	4 M3 threaded holes in front plate & 4 M3 threaded holes in camera case
Tripod Mount	1/4" - 20 mount (optional)
Status LED	Amber - Start-up, Green - Idle or streaming Red - Warning or failed status
Lens Mount	C & CS-Mount, 1" optical format

INTERFACES

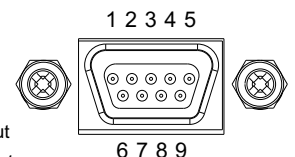
Interface / Data rate / Connector	IEEE 1394A (2) / 400 Mbit / 6-pin GigE / 1000 Mbit / RJ-45 USB 2.0 / 480 Mbit / Type B
Trigger Connector	9-pin Micro D
Trigger Modes	Free running, software, hardware
Trigger Input	Optically isolated 5-12V DC @ 4-11 mA
GPO/Strobe	2 Optically Isolated - Maximum 40V DC differential. Maximum 15 mA

For more information, visit: <http://www.pixelink.com/help>

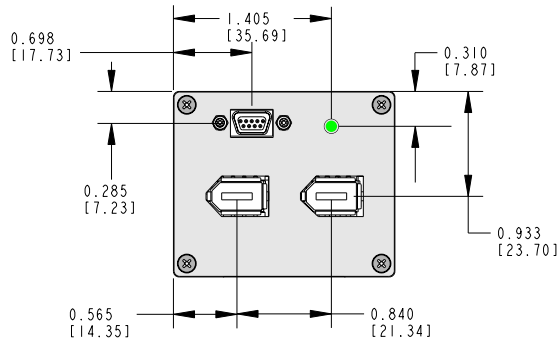
PIN OUTPUT DESCRIPTION

Pin Pin Name & Function

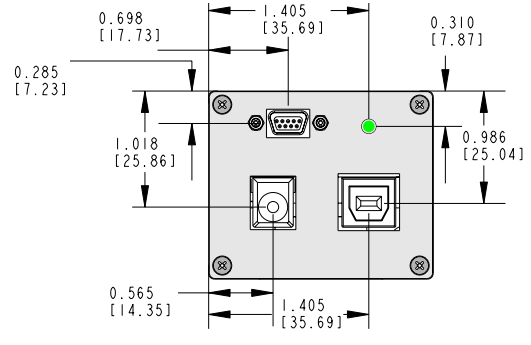
- POWER cable power, FireWire/GigE 8-32 V DC - USB 5 V DC
- Gp2+ Positive terminal of GPO 2
- Gp2- Negative terminal of GPO 2
- Gp1+ Positive terminal of GPO 1
- Gp1- Negative terminal of GPO 1
- TRIGGER + Positive terminal of trigger input
- TRIGGER - Negative terminal of trigger input
- (no connection)
- GROUND Logic and chassis ground



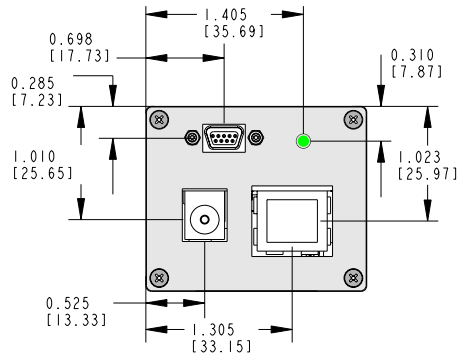
STRAIGHT & RIGHT ANGLED MECHANICAL DEMENSIONS



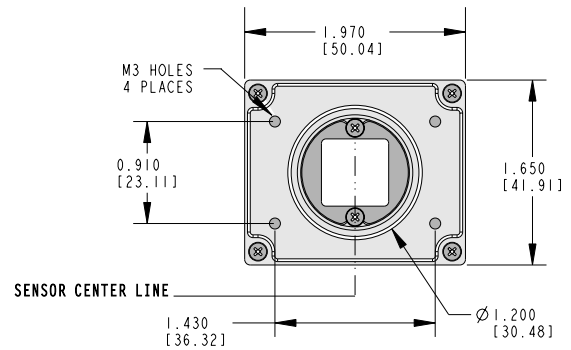
Back Panel FireWire



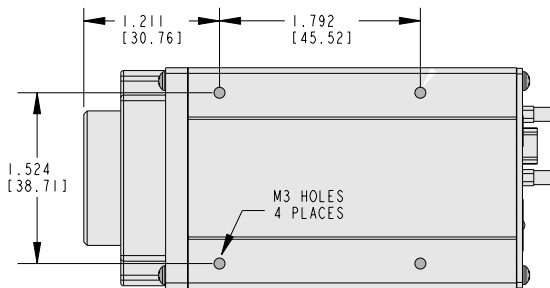
Back Panel USB 2.0



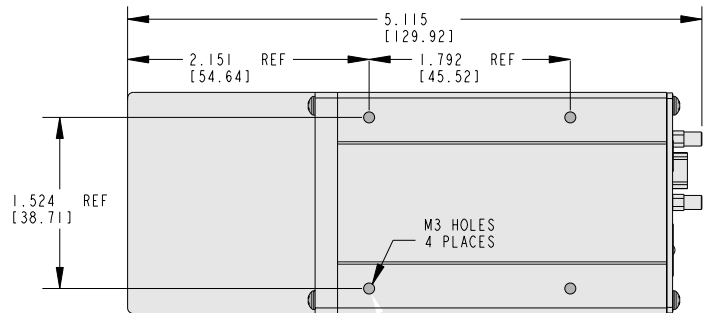
Back Panel GigE



Front Panel



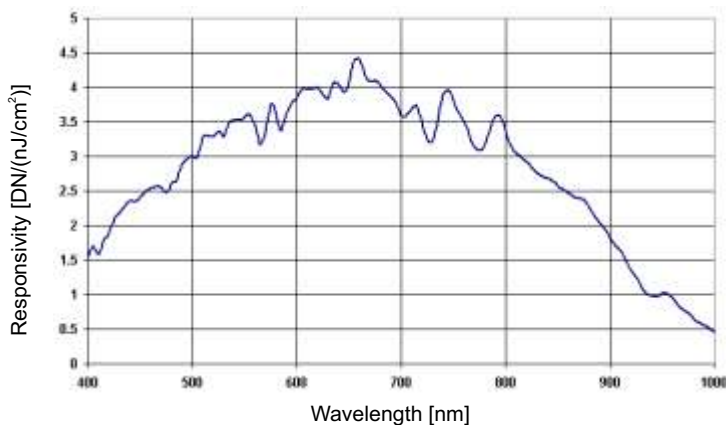
Straight Case Bottom



Right Angle Bottom

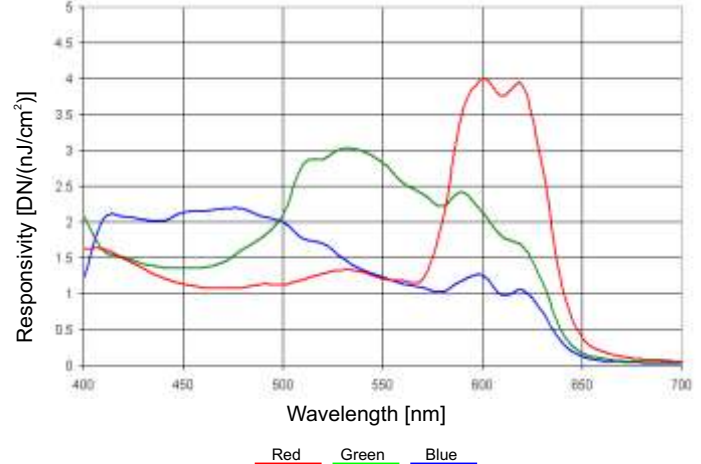
RESPONSIVITY CURVE - MONO

0dB Gain, 10bit Data



RESPONSIVITY CURVE - COLOR

0dB Gain, Channel Gains at Unity, 10bit Data



ANEXO 2. REFERENCIAS

- **Sistemas escáner 3D comerciales**

<http://www.nub3d.com/es/>

- **Fundamentos de análisis de imagen con Matlab**

<http://www.mathworks.es/products/image/description5.html>

- **Comparativa de proyectores**

<http://www.proyector24.es/>

<http://www.maxvisual.es/>

- **Información general**

www.google.es