



AST-DPS-1000

Super Wide Dynamic Color Camera

Features

- 1/3" DPS (Digital Pixel System) Wide Dynamic Sensor
- High Resolution of 480 TVL
- Independent per-pixel Exposure (every pixel is a camera)
- Proper Exposure of Every Pixel
- Convenient OSD Operation
- Day/Night Color Camera with Auto-switch to B/W
- Normal mode: 1.0Lux/F1.2
- Low light mode: 0.08Lux/F1.2
- Multi-sampling every pixel in a single capture frame
- Super Wide Dynamic Range
- OSD Menu with Programmable Settings
- 14-bit Digital Processing
- Excellent Picture Quality



The AST-DPS-1000 uses new Digital Pixel System (DPS) technology. The DPS-1000 provides a wider dynamic range than conventional CMOS/CCD cameras. The DPS (Digital Pixel System) sensor can quickly and precisely adjust for changes in lighting condition in order to achieve high-quality, fully-exposed images.

The AST-DPS-1000 captures sharp and crisp images with horizontal resolution of 480 TVL and vertical resolution of 400 TVL. The camera will automatically switch from color at daytime to B/W at nighttime. The imaging system determines the optimal time to sample and store the pixel information before the pixel is saturated and can no longer hold an additional charge.

The AST-DPS-1000 is specially designed for a super wide dynamic range that is 100 to 200 times greater than conventional CCD cameras. The camera is suitable for applications in scenes with sharp light contrast that require high image quality. It is an ideal replacement for conventional cameras.

Recommended applications include: Highway, Toll Gate, Railway Station, Ports, Squares, Communities, Entrance and Exit of Public Sites, etc.

DPS vs. CMOS/CCD

Imaging technology has been gradually shifting toward totally digital systems and AdSec remains on the forefront of this technology with the new AST-DPS-1000 Super Wide Dynamic Color Camera. The AST-DPS-1000 uses Digital Pixel System (DPS) technology which creates high quality images that are incomparable to CMOS and CCD. DPS technology is truly a breakthrough in imaging technology. An image capture and processing system provides high-quality pictures with an enhanced dynamic range. A technique known as "multi-sampling" is used to gather the information to achieve unmatched image quality and high dynamic range which eliminates pixels that are underexposed (too dark) and some that are overexposed (too bright). Each pixel has its own analog-to-digital converter and the information generated is captured and processed independently. Essentially, each pixel acts as its own camera. A camera with a Digital Pixel System performs as though it contains thousands of individual cameras, each of which produces the best image possible. These images are then combined to produce a high quality video frame or picture.

Brightly Lit Lobby



AST-DPS-1000

Normal

Traffic and Driveways



AST-DPS-1000

Normal

Image Sensor	1/3" DPS (Digital Pixel System)
Signal System	NTSC or PAL Color system
Effective Pixels	NTSC: 720(H)x540(V); PAL: 720(H)x540(V)
Resolution	480 TV Lines
Minimum Illumination	1.0Lux/F1.2; 0.08Lux/F1.2 (Slow Shutter)
S/N Ratio	More than 48dB
Dynamic Range	95dB Typical, 120dB maximum
Control Method	OSD Function Control
Electronic Shutter	Yes
White Balance	Yes
Auto White Balance Range	2000K to 10000K
BLC	Yes
AGC	Yes
Day/Night Function	ON/OFF
Gamma Correction	0.45
Sync Mode	INT/L.L.
Lens Mount	CS/C with Ring
Auto Iris	DC/Video
Video Output	1.0Vp-p, 75 Ohm, sync negative polarity
Power Supply	24VAC/12VDC
Power Consumption	4.5W (Max)
Operating Temperature	14°F ~ 122°F RH: 95% MAX
Dimension	2.44"(W) x 2.36"(H) x 4.76"(D)
Camera Mount	Two 1/4" 20 UNC (bottom and top)
Weight	1.1 lbs



PIXIM™
DIGITAL PIXEL SYSTEM