

PL-D757 and PL-D753 CMOS Cameras

Ideal for High Dynamic Range Imaging Applications

The PL-D757 and PL-D753, based on Sony's 3rd generation IMX420 and IMX421 Pregius CMOS global shutter sensors, offer on camera HDR features ideal for high dynamic range (HDR) imaging applications requiring both high resolution images and high frame rates.

HDR Imaging

HDR imaging is a technique used to render a captured image with a greater dynamic range of luminosity than is possible with standard digital imaging. A key feature of the 3rd generation Sony Pregius CMOS sensors is a Dual ADC mode where each pixel can be read out with two different gains.

The PL-D757 and PL-D753 take advantage of this new feature to combine the dual ADC images into a single hybrid HDR image directly on camera, thus removing the need for any host processing. Real time on camera HDR is an easy way for the user to gain 6dB-10dB of additional dynamic range on their image without loading down the CPU or requiring additional complex software algorithms. Everything is done on the camera which outputs the HDR image directly.

Using one camera and one lens, to look at a single object, two images are captured. The combination of a low gain image (A below) used for bright areas of a scene, along with a high gain image (C below) used for dark areas of a scene, allows details to be discerned in both the bright and dark areas of an image (B below).



Image A: Low Gain Image

Image B: Single Hybrid High Dynamic Range Image

Image C: High Gain Image

The PL-D757 and PL-D753 models combine low noise images with high speed; making them a perfect fit for challenging industrial applications such as moving parts detection, so you dont have to play with lighting, gain or exposure in order to examine the details in both the bright and dark regions.



As with all Pixelink cameras, HDR models are compatible with Pixelink Capture, our free, real-time, interactive, multi-camera software application.

Typical HDR Applications

- · High Speed Inspection
- Security
- Real-Time Sports Analysis
- Medical Imaging

