

Sony develops 'IPELA Engine' capable of an industry-first 130db wide dynamic range in Full HD quality

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Sony Corporation today announced the development of the industry's highest picture quality "IPELA ENGINE", capable of the industry's first 130dB wide dynamic range in full HD quality at 30 frames/second, which has thus dramatically enhanced image visibility. This level of picture quality, the industry's highest, is realized through the combination of Sony's newly developed integrated signal processing system for high picture quality and its new "Exmor" CMOS image sensor that has enabled a further acceleration in signal readout and enhanced noise reduction. The "IPELA ENGINE" will be consecutively equipped into new security camera products from Fall 2012.

The "IPELA Engine" is the general term of Sony's integrated <u>signal</u> <u>processing</u> system for high picture quality which combines the



company's unique signal processing and video analytics technologies. The name of this technology represents Sony's new concept embodied in the high-grade video images, image analytics capabilities and product quality that are delivered through its range of highest-picture quality security cameras.

The "IPELA Engine" is composed mainly of the four components below:

1. View-DR:

Visibility is drastically enhanced and light and dark areas are both expressed in higher resolution by tuning the contrast and correcting tone for both areas through the combination of images taken at varying shutter speeds within a single frame. The "IPELA <u>Engine</u>" is capable of the industry's first 130 dB wide <u>dynamic range</u> in full HD (1920x1080) at 30 frames/second.

2. High Frame Rate:

The shooting of smoother high-resolution images in full HD (1920 x 1080) is now possible through high-speed recording at 60 frames/second, double that of the standard number of frames until now.

3. DEPA Advanced:

The functions for detection of moving objects, humans and any objects blocking the view among others have been enhanced through an alarm detection function using image processing.

4. XDNR (Excellent Dynamic Noise Reduction):

Clear images can now be created in low-light conditions through the



detection and removal of noise within a single frame, in addition to the reduction of noise from differential signals in the consecutive frames.

Sony plans to equip its network camera products with the company's proprietary CMOS image sensors and signal processing systems to gain advantages in the differentiation of its products, and will work to expand the security camera business which it has positioned as a growth area and priority business.

Provided by Sony Corporation

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