Smart coding technology to reduce video surveillance bandwidth and storage

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Panasonic has released Smart Coding, a new technology that enhances the encoding algorithm in standard H.264 video streams, yielding up to a 70 percent improvement in bandwidth reduction.

Available as a firmware upgrade to all new generation Panasonic 3, 5 and 6 Series Models, the technology effectively lessens the bandwidth demand and the amount of storage needed for surveillance video images while maintaining high picture quality and full compliance with the H.264 standard.

Smart Coding technology employs a variety of advanced noise reduction processes and algorithm advancements, including Frequency Divided Filter (FDF); 3-D Multi-Process Noise Reduction (3D-MNR) and Group of Picture (GOP) Control to achieve a lower bit rate for images without degrading the captured and transmitted video stream.

More specifically, FDF and 3D-MNR act to reduce both fine picture noise and video-grain generated under low illumination improving picture quality before compression. GOP Control removes unnecessary information in a scene which results in a lower bit rate.

Together, these features can effectively provide a substantial bit rate reduction (the number of bits per second that can be transmitted along a digital network) in the recorded video without a loss in image quality.

"Smart Coding provides up to 70 percent improvement in bandwidth

reduction, depending on the scene and the amount of movement," said Charlie Hare, Panasonic's National Category Manager, Security and Mobile Video Solutions. "This innovative encoding technology will help users better manage network bandwidth resources, reducing storage requirements and lower the overall total cost of ownership, while still providing the crisp, high-resolution images they've come to expect from Panasonic."

Panasonic's entire portfolio of security solutions for businesses, schools, public safety and retail organizations will be on display at ASIS International 2015, Booth 3709.

  More information: To learn more about Smart Coding or the entire line of Panasonic cameras, please visit www.us.panasonic.com/security

Provided by Panasonic Corporation