

- Vertical: Industrial
- Country/City : Korea, Chun-An
- Model: SD8363E, FD8365EHV
- Total Quantity: 93

VIVOTEK and Samsung Display: Partners In Innovation

Samsung Display – Making the World More Vivid.

Samsung represents the pinnacle of technological innovation in our modern world. One of the biggest multinational conglomerate companies internationally, the South Korean company has rapidly expanded into an amazing range of applications, including an impressive record in industrial electronics, LCDs, semiconductors, mobile phones, and digital media. As well as bringing the future to more people than ever before, Samsung's rise has led to the company achieving the highest revenue in the world among electronics industries. In sum, the Samsung electronics industry is one of the core industries not only in South Korean but also across the globe. However, the remarkable value of the company is not merely based on profits made, but also on the technological innovation that enriches the lives of millions of people around the world.

Samsung's impressive record begins with an equally impressive investment in research and development. Located in Chun-An, the Samsung Display division houses an extensive R&D center and manufacturing plant for AMOLED (active-matrix organic light-emitting diode) display technology. Launched as the TFT-LCD task-force in 1991, with TFT-LCD production initiated two years later, AMOLED technology was added in 2001 and brought into the Samsung family. The investment paid off with Samsung Display now ranked number 1 in the world in the field of small, medium and even larger size LCD and AMOLED displays, but Samsung continues its pursuit of excellence with a continued rejuvenation of the R&D and manufacturing center.

The Challenge: A Dedication to Perfect Displays Means the Need for Perfect Surveillance

Samsung Display's commitment to constant technological innovation and to the strictest standard of quality control brought rise to a new challenge. As technological advances increase, strict quality control is ever more important in order to maintain the high standards of all Samsung products. What Samsung Display required was a system of state-of-the-art surveillance network cameras that could scan the production line for any manufacturing errors or defect. They required not only cameras that could pan, tilt, or zoom in order to deftly detect anything unusual, but also cameras that could maintain a high degree of image clarity even in the low light conditions required for some lines. They also required the entire system to be comprehensively managed for streamlined operations and

minimum down-time. Samsung Display, the world leader in display technology, reached out Hansung SMB Solution to deploy VIVOTEK solution, the world leader in IP network surveillance.

The Solution: VIVOTEK's Network Cameras Keep Watch on the Production Line.

A total of 93 cameras were installed across the manufacturing lines at Samsung Display. Due to the strict requirements of the manufacturing and quality control process, two ideal IP network cameras were selected from VIVOTEK's broad range of models. For areas in which flexibility of view was vital, 77 SD8363E Speed Dome network cameras were installed in the ceiling of the production area. The SD8363E's 1080p Full HD resolution results in the superb image quality needed to detect even minor defects or irregularities the production process. Adopting a 20x optical zoom lens, the SD8363E is able to capture these details at top-notch quality and with its sophisticated pan/tilt mechanism, the camera provides fast, precise movement with continuous 360-degree pan and 220-degree tilt. Further increasing usability, Samsung Display quality control staff can easily control the lens position via a mouse or a joystick to track any object of interest and maintain complete control of the production process. What's more, with Audio Detection, which recognizes increases or decreases in sound volume, any suspicious activity in the production area will be immediately noticed.

Illuminating the Production Process at Samsung Display – VIVOTEK's FD8365EHV

For low-light areas of the manufacturing plant, 16 FD8365EHV Fixed Dome Network Cameras were mounted into the ceiling above the production lines. Offering 30 fps at 2-Megapixel resolution with superb image quality, the FD8365EHV, like the SD8363E, provides the clarity and precision necessary for finely monitoring the delicate production process at Samsung Display. However with its added 3D Noise Reduction Technology, the FD8365EHV is empowered to capture clear, polished video under low-light conditions and reduce bandwidth from sensor noise. To provide top-notch imagery of the production process at Samsung Display, the FD8365EHV also comes with a P-iris lens, which controls the iris with extreme precision with its built-in stepper motor. By using software controls, the lens maintains the iris opening at an optimal level at all times, resulting in superior sharpness and depth of field as well as image quality. For the team at Samsung Display, this amazing functionality means that even on production-lines which require low levels of lighting, VIVOTEK's IP network cameras enable them to effortlessly monitor and control the production process with enhanced accuracy. It is VIVOTEK's dedication to excellence in the field of surveillance and monitoring that enables the team at Samsung Display to continue to excel in the field of video displays.