

# THINK VISUALIZATION

## LG ELECTRONICS CASE STUDY



Learn how LG used N3N's INNOWATCH to  
Detect and Resolve Manufacturing Production  
Line Problems



# LG ELECTRONICS



## ABOUT LG ELECTRONICS

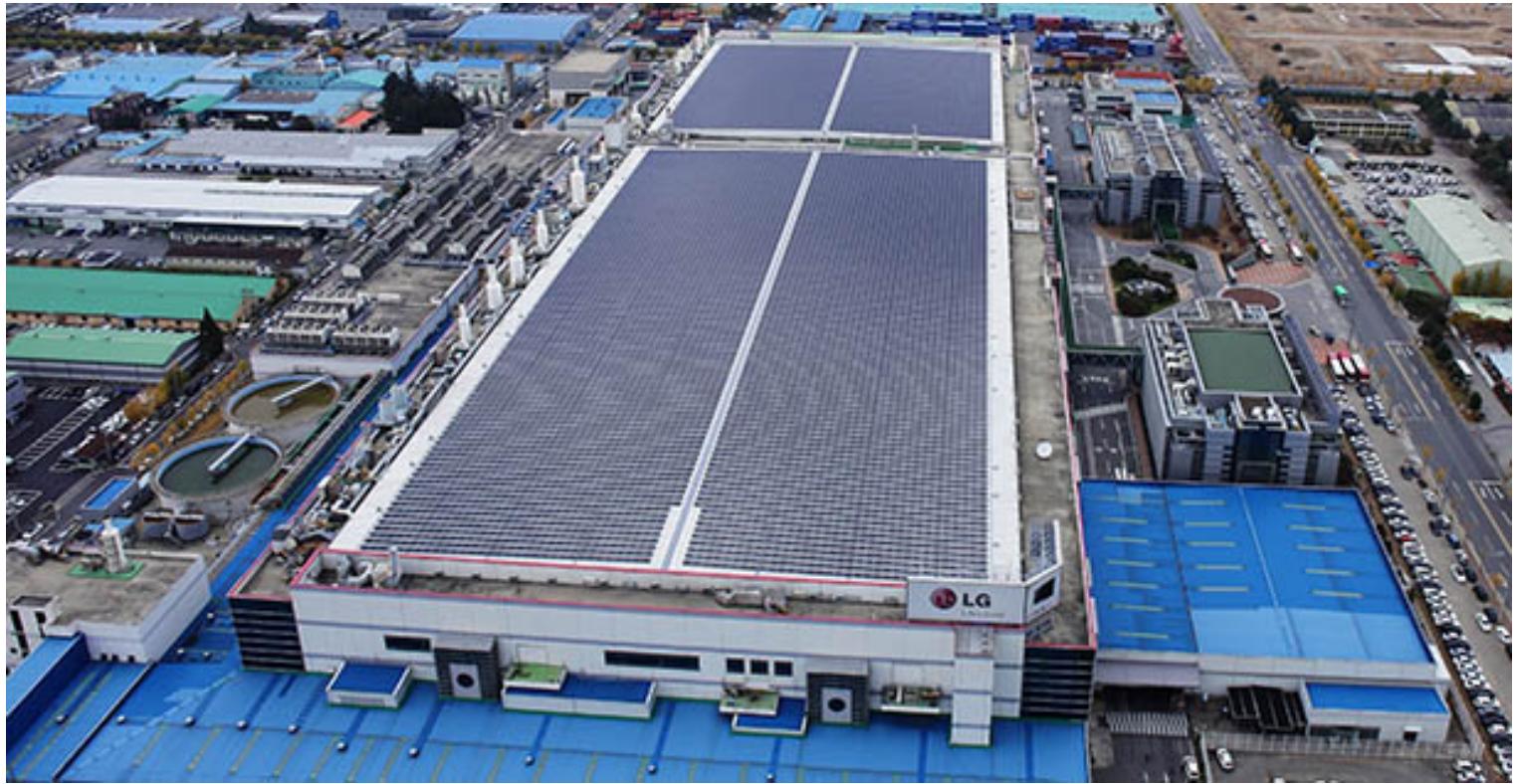
LG Electronics is a multinational electronics manufacturing company based in Seoul, South Korea, that employs almost 100,000 people working in over 100 subsidiaries worldwide. With global revenue on the order of USD \$50 billion, LG is a leading manufacturer of television screens, home appliances, mobile communications devices, vehicle components and more.

## LG's NEEDS

LG's dust-sensitive display panel production line requires strict and lengthy procedures for personnel to enter a clean room, which can lead to significant delays and production loss.



# LG ELECTRONICS



## N3N DELIVERED THE SOLUTION

- Ability to monitor system screen in FAB from remote operating system room without any latency.
- Operators are now able to take action when problems arise on the production line.
- Maintain low latency in control room by replacing legacy analog fiber optic network environment with LAN.
- Utilizing LAN minimizes maintenance costs and removes the need for new fiber cable routing as assembly line modifications occur.
- Installed N3N RDS-TX in FAB to transmit its screen videos through the network.
- Installed N3N RDS-RX in remote operating system room to control and receive system screens.
- Support Full-HD screen input at 60 fps with latency under 0.002 seconds.
- Resolved latency issues by controlling and viewing remote server on LAN network.



PRODUCT	MAINTENANCE / SUPPORT METHOD	YEARLY TRAVEL AND LABOR COST
Conventional system	On-site	\$480,000
INNOWATCH	Remote Access	\$48,000
Yearly Savings		\$400,000

# SOLUTION OVERVIEW

## MONITORING/DETECTION



## VISUALIZATION



WITH N3N



Locate and Solve  
Problems in Real-Time



Monitor All Your Systems  
and Applications



Big Data Analytics  
and Reporting

## N3N Products and Solutions

### WIZEYE

The solution provides an easy way to monitor all your IT operations, applications, infrastructure and business services from a single view. Gone are the day's of hunting for a needle in a haystack. With WIZEYE your team is able to easily locate, analyze and solve problems in minutes. Monitoring, detecting and predicting issues is simple as we bring all your systems together in a Single-Pane-of-Glass.

### INNOWATCH

A complete solution for monitoring all your data sources, facilities, business operations and monitoring systems from a single station. Maps, video feeds, computer screens and data are integrated into one display for convenient monitoring, detection and issue notification. INNOWATCH offers a true command and control environment which includes functions like PTZ control, remote PC control, external device control and alarm response all from a Single-Pane-of-Glass.

### CUSTOMERS RUN N3N

Brands across the globe run N3N for IT/business operation monitoring, APM monitoring, data center monitoring, security monitoring, facility monitoring and a whole lot more.

# ABOUT N3N

## ABOUT N3N

The company is Headquartered in Seoul, South Korea with North American operations located in San Jose, CA. N3N has developed and markets a comprehensive range of data visualization solutions for the public and enterprise sectors.

## N3N's VISUALIZATION

Solutions provide highly scalable image processing while integrating IoT, Big Data, videos and maps into a Single-Pane-of-Glass. Today N3N's solutions are run across a wide range of IoT sectors including: Manufacturing, Smart Cities, Buildings, Traffic, Security, High Tech, Retail, Healthcare, Utilities and more.

