Hanwha Techwin

Company
Overview

A global leader in the video surveillance industry
Hanwha Techwin

Hanwha Techwin

A leading global security company, Hanwha Techwin
has built its professional expertise in the video surveillance
business based on world-leading optical, manufacturing, and
image processing technologies accumulated about 30 years
since our first launching of a surveillance camera in 1990.
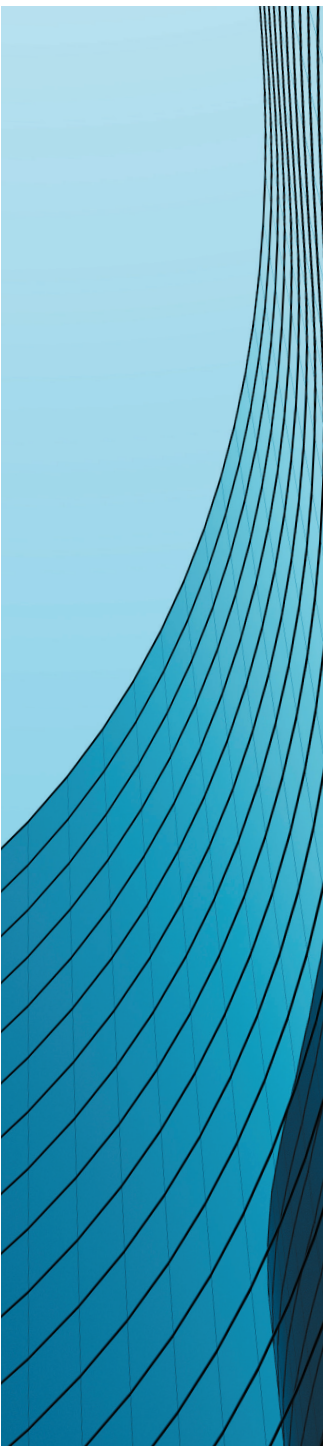
Hanwha **Group**

Founded in 1952, **Hanwha** is a FORTUNE Global 500 company
and the 7th largest business group in Korea,
comprising of 76 domestic affiliates and 351 global networks around the world.

Hanwha's business area included span aerospace & mechatronics,
chemicals & materials, solar energy, finance, service & leisure, and construction.
By integrating its growing number of affiliate enterprises worldwide,
Hanwha is harnessing the power of sustainable, quality growth to
continually increase the value we bring to customers.

Products & Services

Aerospace & Mechatronics

Hanwha Corporation
(Machinery / Explosives)
Hanwha Aerospace
Hanwha Techwin
Hanwha Systems
Hanwha Defense
Hanwha Power Systems
Hanwha Precision Machinery

Solar Energy

Hanwha Q CELLS
Hanwha Energy
Hanwha Solar Power

Services & Leisure

Hanwha Hotels & Resorts
Hanwha Galleria
Hanwha Galleria Timeworld
Hanwha 63 City
Hanwha Station Development

Chemicals & Materials

Hanwha Chemical
Hanwha Total Petrochemical
Hanwha Advanced Materials
Hanwha General Chemical
Yeochun NCC

Finance

Hanwha Investment & Securities
Hanwha Life
Hanwha General Insurance
Hanwha Asset Management
Hanwha Savings Bank

Construction

Hanwha Engineering & Construction
Hanwha City Development

Hanwha delivers energy to customers
to make our future
more vibrant and sustainable.

Hanwha Techwin **brings you**
security solutions
that deliver values beyond safety.

Hanwha Techwin

A leading global security company, Hanwha Techwin has built its professional expertise
in the video surveillance business through its world-leading optical, manufacturing and image processing
technologies, accumulated about 30 years since our first launch of a surveillance camera in 1990.

As the world welcomes the 4th Industrial Revolution, we are leading the market by taking advantage of
next-generation technologies, such as Deep Learning, Artificial Intelligence (AI) and Business Intelligence
(BI). We are also able to offer solutions tailored to meet the requirements of various vertical markets.
By offering cybersecurity that customers can trust and rely on, we are growing as a total security solution
company which provides high satisfaction and value, as well as real-life practical benefits.

Hanwha Techwin will continuously strengthen its development and marketing investments
in the security business to drive future growth.

History

2010 ~ Current

- **2020** - Developed Wisenet 7 SoC

- **2019** - World's first 55x IR PTZ camera launched

- **2018** - Hanwha Techwin Vietnam
  manufacturing subsidiary established

- **2017** - Winner of IF Design Award,
  Red Dot Design Award

- **2017** - Wisenet 5 SoC and Wisenet X camera
  series launched

- **2015** - Hanwha Techwin is formed by
  strategic acquisition by Hanwha Group

- **2015** - Winner of Red Dot Design Award

- **2015** - Wisenet Lite series launched

- **2013** - Wisenet 3 SoC and camera series
  launched

- **2012** - Winner of Red Dot Design,
  CES Innovation Award
  - World's first 37x IR PTZ camera launched

- **2011** - B2C business began

1990 ~ 2009

- **2009** - Tianjin and Shanghai subsidiaries established

- **2008** - Korea's first 37x optical AF PTZ camera
  launched

- **2004** - Winner 3 analog ISP chip developed

- **2001** - Europe subsidiary established

- **1997** - World-class ultra low-light surveillance
  camera launched

- **1993** - Korea's first auto-iris lens for CCTV cameras
  developed

- **1990** - Video surveillance business established
  America subsidiary established(Dec 1989)
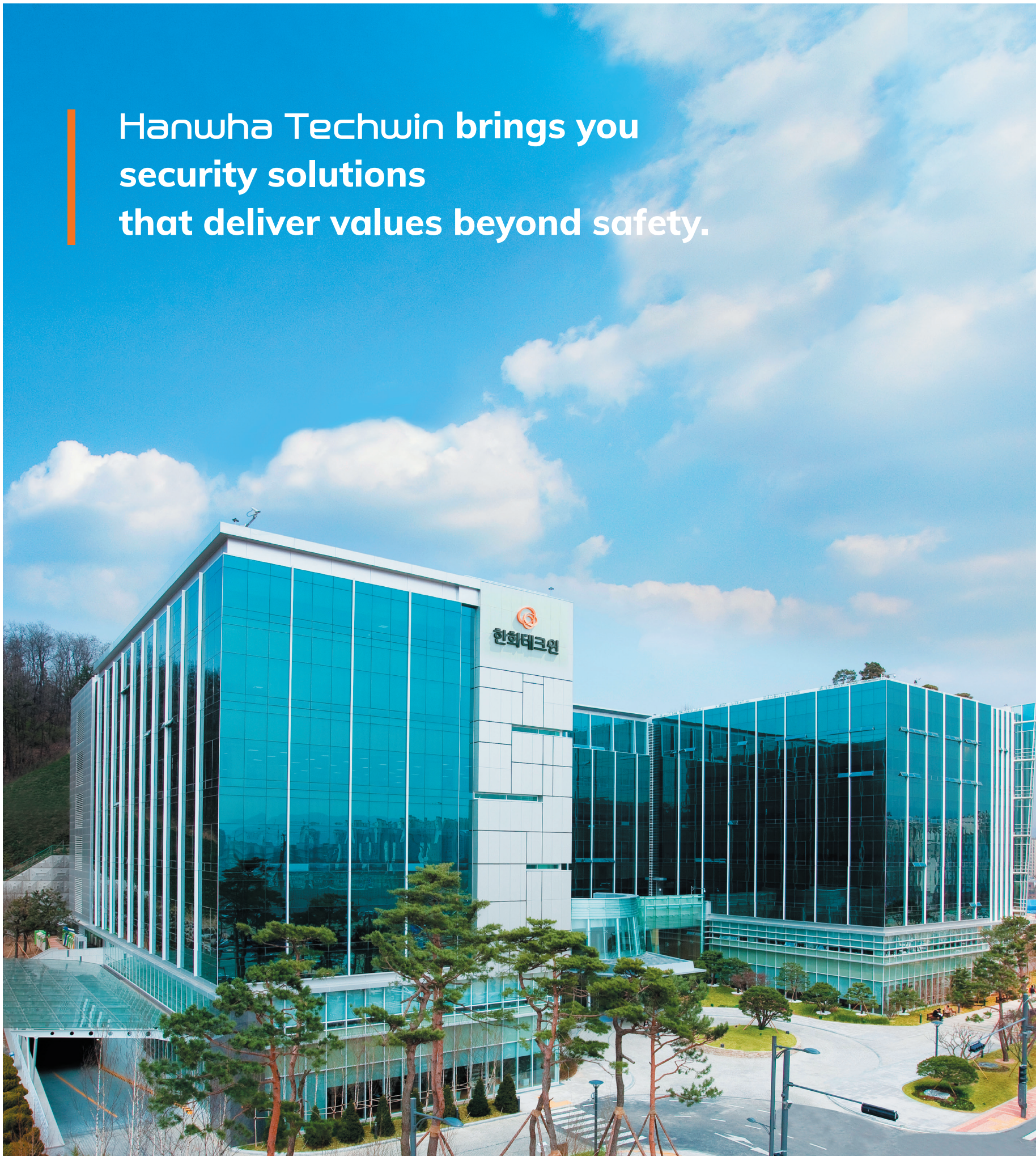
Based on its solid core technologies,
Hanwha Techwin **strengthens**
its competitive edge for the future
by harnessing innovative technologies.

Engineered in Korea

Hanwha Techwin's R&D(Research and Development) Center, is located in Pangyo Techno Valley, Gyeonggi-do, South Korea. The large R&D complex, which is focused on state-of-the-art technology and innovation, is also a home to many other of Korea's world leading companies. In the middle of the R&D hub, Hanwha Techwin is developing a variety of advanced technologies helping to drive the global video surveillance industry toward the future.
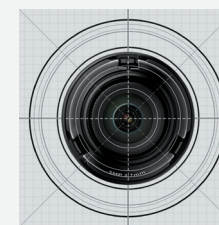
Core Technologies

Based on long-established optical and image-processing technologies, Hanwha Techwin has competitive edge not only in optical lenses but also in SoC cameras chipset development.
As technologies become more advanced and security solutions are leveraged across all areas of life, the role of security goes beyond just monitoring. It is now being utilized in many other ways in order to fulfill the growing market demand for built-in analytics capabilities and intelligent functionality.

In order to provide agile response to such trend, Hanwha Techwin will strive to achieve technological advancement by developing deep-learning and AI solutions.

01. Optical design technology

Based on world class optical and image processing technologies, Wisenet provides high precision and resolution cameras.
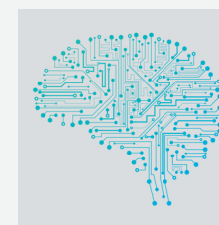
02. SoC design technology

Outstanding level of SoC (System on Chip) design capabilities evident in our Wisenet SoC are also equipped with diverse analytics technologies.

03. Intelligent Analytics technology

Hanwha Techwin provides exclusive solutions for intelligent analysis thanks to its unique analysis algorithms.

To ensure
**24/7 reliability of our products,
we added smart manufacturing system
to our top technologies.**

High-tech Powered in Vietnam

Hanwha Techwin's manufacturing subsidiary in Vietnam(HTSV)
has been in operation since 2018 in order to expand
its global production capability as well as to strengthen
cost competitiveness. Through automation and smart systems,
Hanwha Techwin has built sophisticated and fast-moving
manufacturing lines producing all its product line-ups
including cameras and storage devices. All products produced in HTSV
go through a reliable manufacturing and quality assurance process
and sold globally, these products represent 75% of Hanwha
Techwin's total sales.

Hanwha
Techwin
**South Korea
(HQ)**
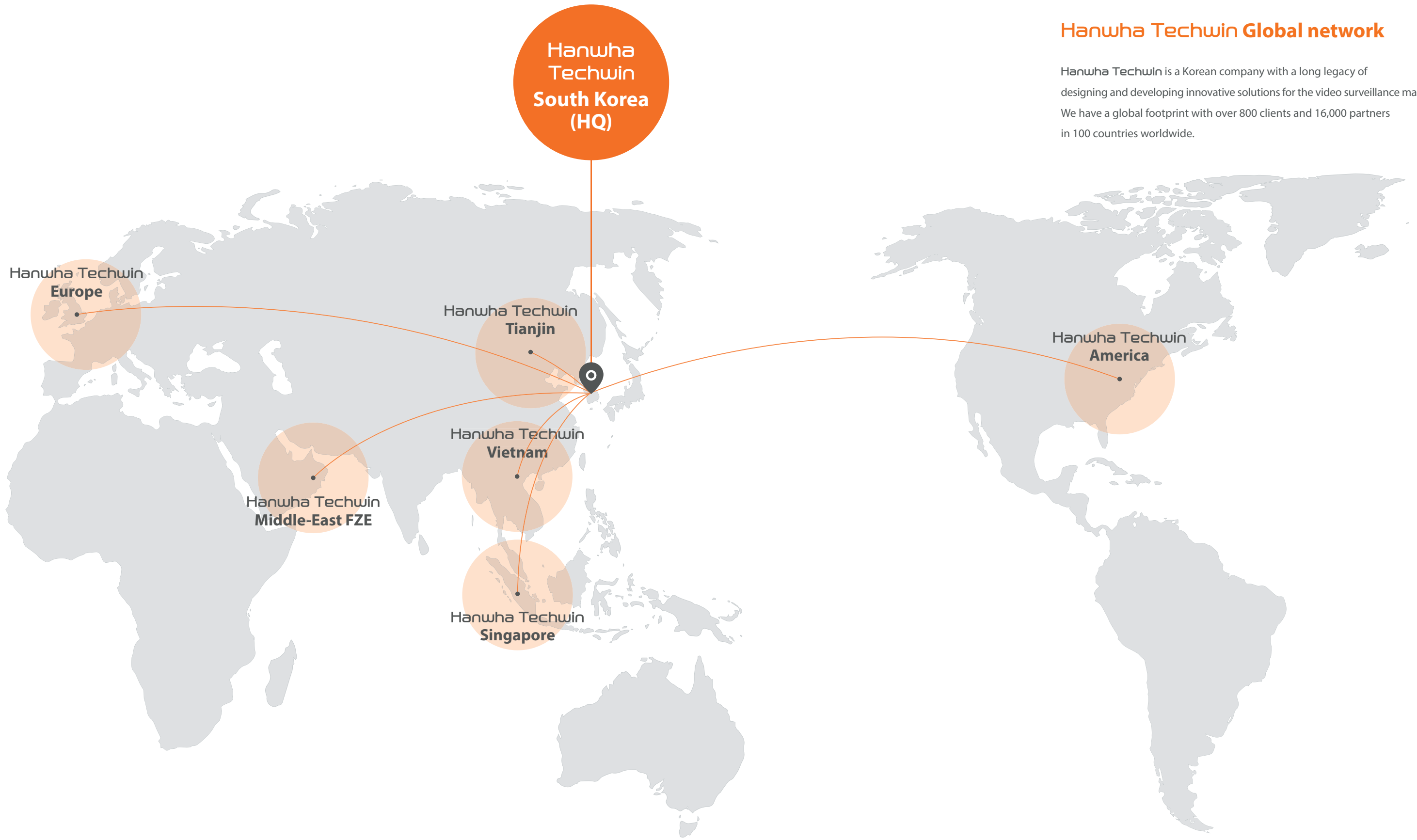
Hanwha Techwin **Global network**

Hanwha Techwin is a Korean company with a long legacy of
designing and developing innovative solutions for the video surveillance market.
We have a global footprint with over 800 clients and 16,000 partners
in 100 countries worldwide.

Hanwha Techwin
Europe

Hanwha Techwin
Tianjin

Hanwha Techwin
America

Hanwha Techwin
Middle-East FZE

Hanwha Techwin
Vietnam

Hanwha Techwin
Singapore

Hanwha Techwin products

WISENET

Wisenet is the signature brand of Hanwha Techwin that represents Hanwha Techwin's excellent technologies and products.

Professional Security Product Lineups

WISENET P series

An ultimate premium series designed with the most advanced technology, delivers users outstanding video surveillance solution.

WISENET X series

A series supercharged by the most powerful wisenet chipset gives the best video performance.

WISENET Q series

A basic entry series that delivers professional quality, ideal for securing small-to-mid sized applications.

WISENET T series

A series of specialized cameras that ensure a reliable video surveillance system even in the most challenging conditions.

Home Security Product Lineups

WISENET SmartCam

The SmartCam series offers indoor and outdoor home monitoring with 24/7 connectivity for users.

WISENET BabyView

The BabyView series offers optimized baby home monitoring for parents which ensures safety and security of their children.

WISENET All-in-One

The All-in-One series support easy installation and is designed for indoor/outdoor monitoring of home and small-to-mid-sized stores.

01

Network / Analog Cameras

02

Recording Solutions
NVR / DVR

03

Lenses, Encoders, Decoders

04

Vertical specialized Cameras
Thermal / Stainless / Explosion-proof / Pinhole

05

Smart Home Cameras

06

All-in-One Solutions

Why Hanwha Techwin**?**

Business Ethics
We respect our partners.

Good Product Range
We answer all your needs.

Best Quality
We guarantee quality.

Affordable Price
We provide great value.

Cybersecurity
We build robust security.

Hanwha Techwin **Cybersecurity Enhancement Activities**

Hanwha Techwin operates a security vulnerability response team (S-CERT) to prevent illegal and unauthorized security breaches from external sources and internal security flaws.

Security Vulnerability Response

- External security vulnerability monitoring
- Response within five working days (firmware issuance)
- Security vulnerability report announced on website

Product Security Quality Improvement

- Internal security check and test
- Periodic penetration test
- Cybersecurity whitepaper and Network Hardening guide distribution

Security Solution Development

- Device certification insurance management system development
- Unique device certificate and private key application

Security Certification Acquisition

- Major security certifications acquisition

Wisenet
Solutions

Hanwha Techwin offers a variety of optimal video surveillance solutions to serve all of our clients' needs.

01 Wisenet Solutions
Smart & Safe City

02 Wisenet Solutions
Transportation

03 Wisenet Solutions
Retail

04 Wisenet Solutions
Banking

05 Wisenet Solutions
Smart Factory

01

Wisenet Solutions
Smart & Safe City

In Smart & Safe City, video surveillance goes far beyond simple monitoring.
Video surveillance now acts as analytical tools
as well as indicators for city operations.

To meet the new challenges in the changing times,
Hanwha Techwin presents the most optimized solutions
for wide area surveillance and data analysis.

Smart & Safe City Solution Features

Specialized product line-ups for urban environment

- Multi-directional and super high resolution cameras for wide coverage capturing even the smallest details
- Efficient operation with intelligent video and audio analytics
- Optimized mobile and wireless solutions

Public safety & Traffic management

- Deter crimes with its presence and through recorded footage for later investigations
- AI solution classifies a vehicle by its color and type to identify and track vehicles involved in traffic violation or crime
- Remote monitoring from central control center

Improved operational efficiency

- With AI-based privacy masking technology, personal image information such as people and vehicles can be protected.
- Smart Search can significantly reduce your time searching for crime scene or suspects.

Project Case

King City, CA - USA

Wisenet helps reduce violence and improves safety

"

The Wisenet cameras are working wonders. Last year, we had 32 shootings and three homicides but since the cameras were installed, we've only had one shooting.

- Chief Robert Masterson, King City, California

"

02

Wisenet Solutions
Transportation

Bus, subway and railways are key public transportation infrastructures
that require security solutions with stable operation
to secure passenger safety and protect facilities.

Hanwha Techwin's transportation solutions provide
stable monitoring even inside moving vehicles including buses and trains.
It also offers high resolution live monitoring of areas
where wide monitoring is required such as station and platform.
Robust cameras and recording devices, supported by wireless network
communications, automatic video back-up and real-time vehicle tracking, enable
operators to respond quickly and effectively to any incidents.

Transportation Solution Features

Transportation-dedicated Solution

- Acquired transportation-specific standards
- Real-time monitoring of railroad car location and status
- Automated video backup over wireless networks
- Specialized cameras for transportation solution (including front-facing)
  and NVR line-ups

Superior system reliability and expandability

- Failover and recovery capabilities
- Flexible system expansion via hierarchical configuration
- Interface with other systems (access control, fire alarm)

Project Case

London Midland Station – UK

360° wide monitoring, creating a safe environment while securing
important evidence of possible anti-social events

"

In addition to helping create a safe environment,
the new video surveillance systems installed at each of the stations
are also assisting security personnel to detect anti-social behavior
and other forms of criminal activity.
I am pleased to report that a number of successful prosecutions
have taken place as a direct result of the availability of
the evidence grade images captured by Wisenet.

- Anthony Sykes, Construction Engineering Manager for Babcock, said.

"

03
Wisenet Solutions
Retail

The priority of modern day retail business is to enhance the customer experience, and to identify and meet their rapidly changing needs and preferences.

Hanwha Techwin's retail solutions not only meet the basic requirements of safety and security, but also necessary Business Intelligence data such as consumers' store traffic through heatmap and visitor count to help businesses thrive.

Retail Solution Features

Specialized for retail and integrated surveillance

- Effective and affordable coverage options, including 360° fisheye and various compact cameras
- Cameras with high-resolution and WDR for loss prevention and real-time evidence
- Efficient centralized management and mobile monitoring

Analytics for business intelligence

- Store management using built-in analytics; people counting and heatmap
- Better customer service with checkout queue management
- Deep insight gathering from Wisenet BI Solution

Project Case

The Hyundai Department Store, Pangyo – Korea

Pleasant shopping environment with real-time safety monitoring

"

We are closely monitoring escalators to deal with safety and instances in which items are lost and we are very satisfied with the quality of Hanwha Techwin cameras. Sometimes, the police visit to find recordings of accidents that took place near the store. I was told that the high-quality image we shared provided a lead in solving a case.

- A Safety Manager, Hyundai Department store, Pangyo, said

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04

Wisenet Solutions
Banking

Hanwha Techwin offers a wide range of surveillance products so that customers can easily switch from old legacy systems to state-of-the-art solutions which utilize the latest advances in technology and can be applied to various banking applications, such as vault monitoring, ATMs and services points.

In addition to surveillance products, we also offer flexible systems with outstanding scalability that can be used to integrate with other security systems used by banks.

Our products provide excellent manageability through various tools to quickly and easily manage equipment installed at multiple branches.

Banking Solution Features

Complete visibility for safety

- Cameras with high-resolution and WDR for real-time evidence and crime deterrence
- Thorough monitoring in any surroundings without disharmony
- Efficient operations with intelligent video and audio analytics

Central management and data integrity

- Large-scale equipment management
- Failover and recovery capabilities
- Interface with bank IT infrastructures
- Trustworthy network security

Project Case

UKRGASBANK – Ukraine

Searching time reduced by max.92% by installing centralized network security system

> **"**
>
> The average event searching time with previous system was about 2 hours, and now, with the new system by Hanwha Techwin, it is done within 10 minutes. The comprehensive solution fully met our expectations and allowed us to build a solid foundation for the security systems in future.
>
> - Konovalov Ihor Viktorovich, Director of Security Department, UKRGAZBANK, said.
>
> **"**

05

Wisenet Solutions
Smart Factory

Industrial facilities are transforming into smart factories by adopting more IoT connections, automation, and smart systems. As demand for smart operation and management increases across various industries, having a safe working environment becomes more important and the needs for specialized solutions increases.

Hanwha Techwin offers safety-focused AI solutions based on deep-learning technology to secure workers' safety and assure safe working environment.

Furthermore, specialized products meet the specific purposes of the various infrastructure and industrial facilities such as chemical, oil, gas, etc.

Factory Solution Features

Safety-focused AI solution

- Automatically detect when someone fails to wear a safety-helmet and triggers warning alarms by utilizing deep-learning based AI algorithm
- Detect abnormal behaviors such as slip and fall and enable swift response to safety-related accidents by using skeleton algorithm

Specialized for industrial environment

- Explosion-proof cameras prevent sparks escaping from the device in case of an internal explosion or fire and assures safe working environments in industrial facilities such as power, oil, chemical plants.
- Radiometric thermal cameras can measure temperature of designated areas to identify entering object or people to protect facilities against intrusion.
- Stainless cameras are highly resistant to corrosion and acid and are optimized for industrial facilities handling chemicals, fire and heat as well as humid and windy environments.

Project Case

Hanwha Chemical - Korea

Securely monitor hazardous industrial environments where they deal with gas, petroleum, and chemicals

66

We have high levels of trust in Hanwha Techwin cameras as they have received rigorous European certifications for explosion-free cameras. Above all, remote monitoring feature that allows real-time surveillance of every corner of our facility is most satisfying.

- Joon Yung Nho, Public Affairs Team, Hanwha Chemical Ulsan 1 Production Site

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