

September 6th
10.00AM CET

Topic

How to build your mobile CCTV tower



Henk de Haan
CEO
Telescopic Mast



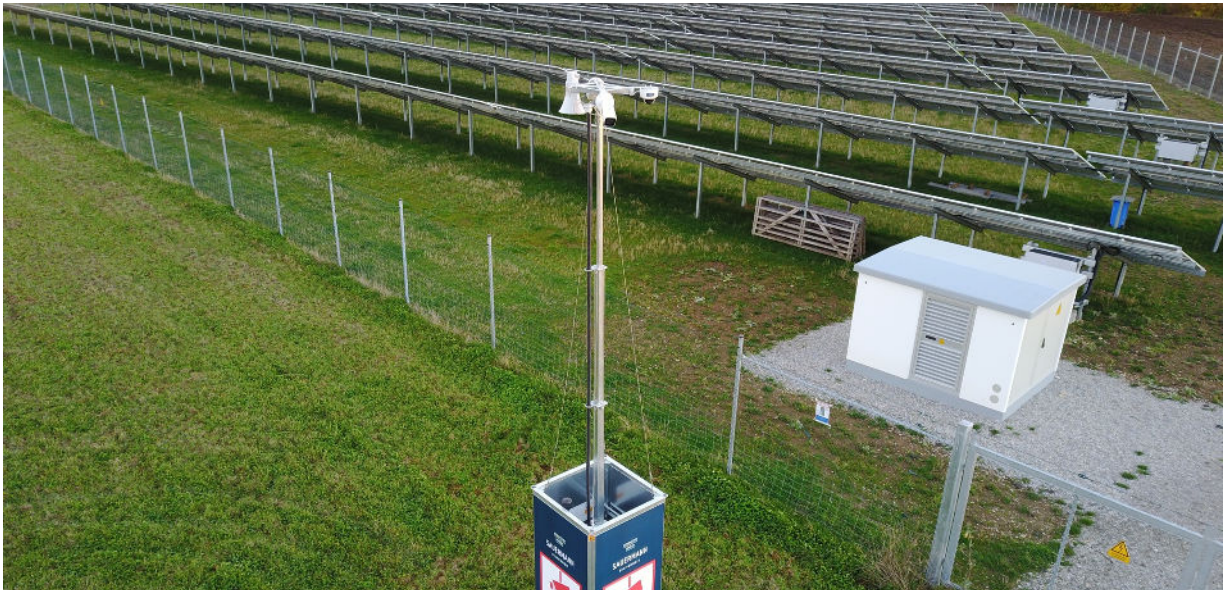
Gerrit van Weeren
pre sales engineer at
Hikvision Europe



Erik Herrmann
sales director at
SFC Energy AG

Agenda

- 10.00 Welcome and introduction
- 10.15 SFC Energy AG
- 10.45 Hikvision
- 11.15 Q&A



Typical applications :

- Improving safety at major events, festivals, concerts & public gatherings
- Construction and industrial site security
- Roadside and traffic monitoring
- Protecting vacant properties
- Protecting infrastructure
- Reducing cable and metal theft
- Wind and solar farm security
- Crime hotspots such as car parks or isolated locations
- Preventing and minimising fire risk
- Railway sidings

TelescopicMast

- Founded in The Netherlands
- Focus on high quality steel CCTV Towers
- 25+ years experience in steel products
- Global operations
- 185 + customers
- Continuous innovation based on customer feedback
- CE and TuV



MSB Basic



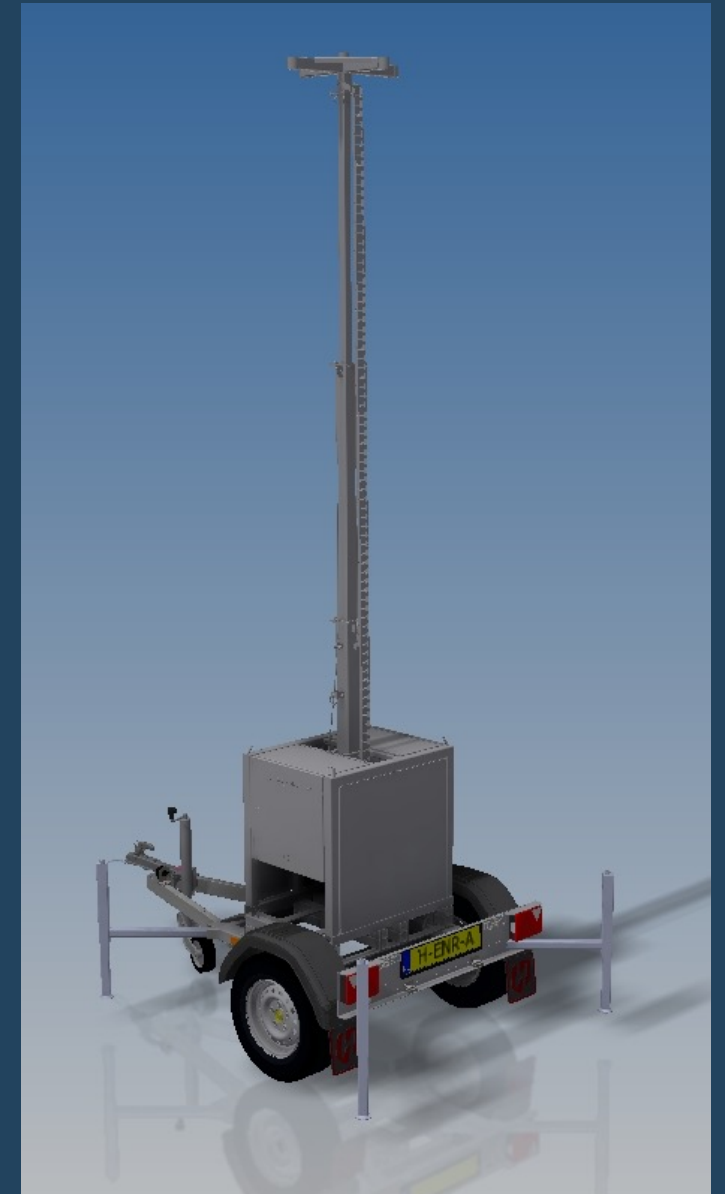
MSB Basic Plus



MSB Premium

Compact + Trailer

(pre-order Q1 23)



The Mobile Security Box

**ADD
YOUR OWN
DEVICES**



PIR



**3G/4G
transmission**



**Solar/Fuel
Cells**



Cameras

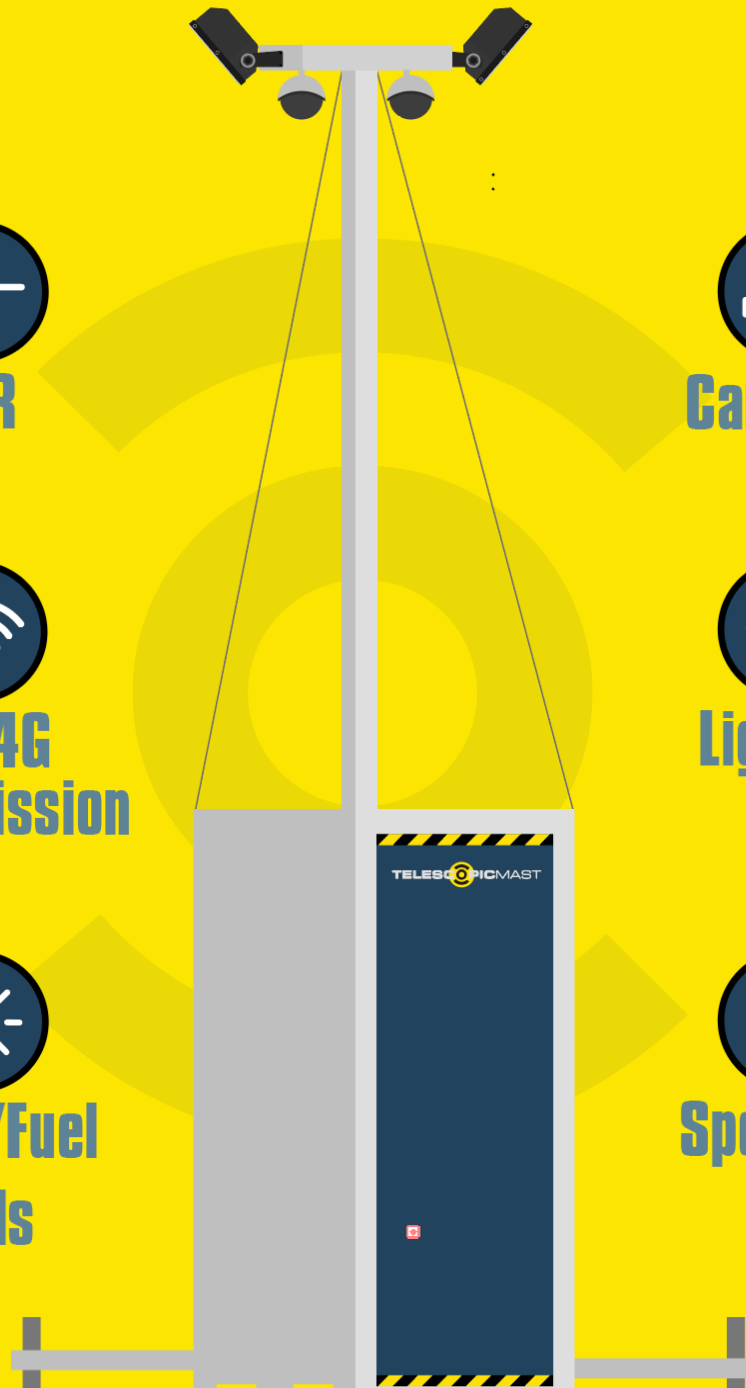


Lighting



Speakers

TELESCOPICMAST



Keynote – SFC

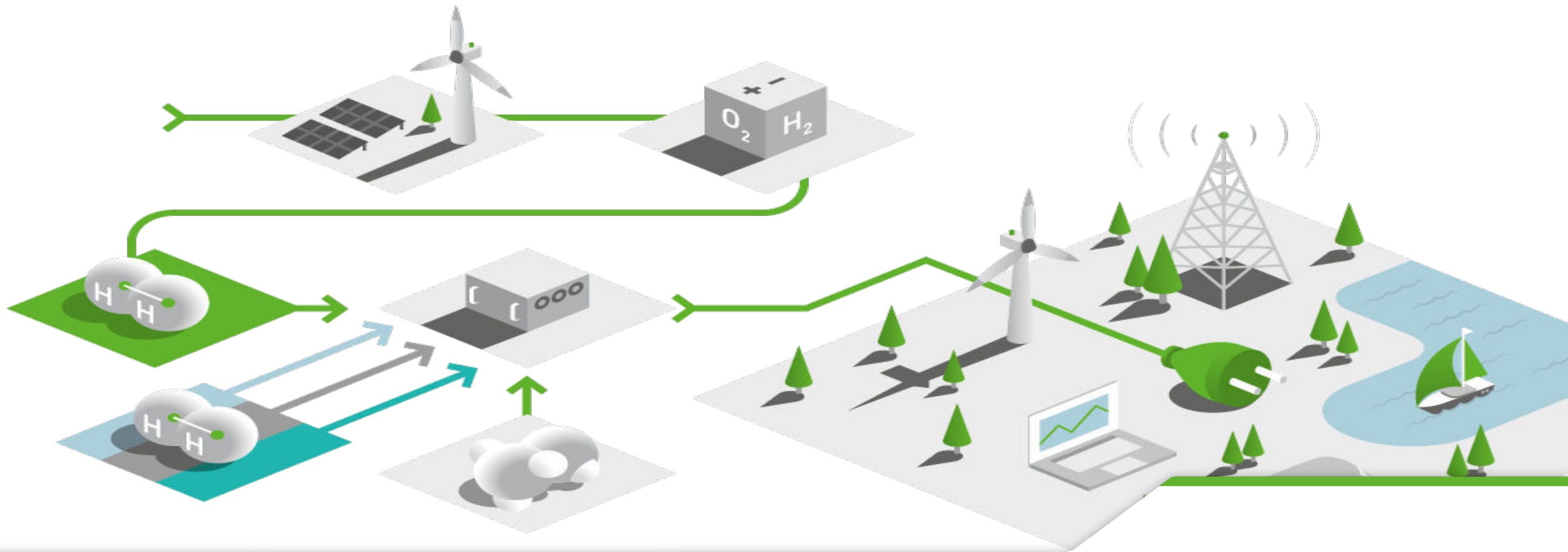


Erik Hermann
Sales Director



EFOY Pro Fuel Cell Solutions

Clean Energy. Anytime, Anywhere.



September 2022



64 million €

Sales (2021)

296

Employees

4

Locations

Brunnthal (HQ)

Calgary

Almelo

Cluj



>55,000

Fuel cells sold
worldwide



ISO-certified for quality standards
and environmental guidelines

European Innovation Award
winner in 2021

100+

Global Sales and
Distribution
Partners



110 million*

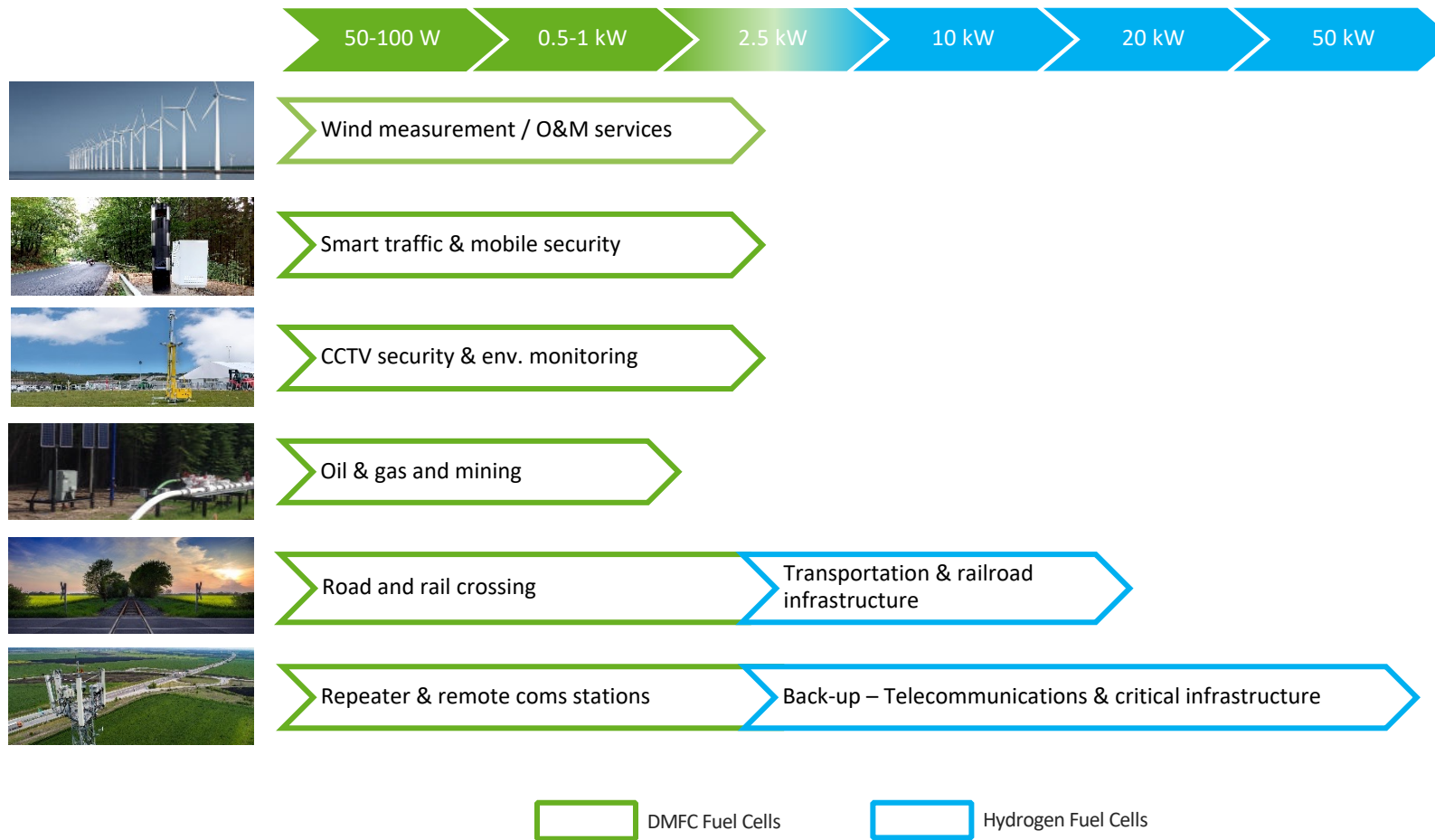
Operating hours

7.2 million kWh*

Environmentally friendly
energy

Fuel Cell Market Segments in industrial applications

Growing demand for green power solutions in remote and urban areas



Market Success

Security & Monitoring

SFC's Security Market Growth

28% CAGR



Video Surveillance Market

62,3 Billion Euro

Forecasted market size in 2026

Source: Marketsandmarkets

Drivers for Adoption

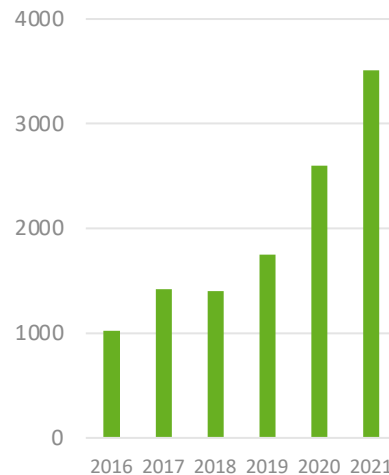
Public safety and security

Remote monitoring & data storage

More hardware per installation

Source: Marketsandmarkets

EFOY Fuel Cell Growth



Opportunities

Smart cities

Autonomous energy solutions

Environmentally friendly & quiet

Source: Marketsandmarkets

Testimonials

Press Releases

01 Mar 2022, Investors, News, Press Release

LiveView Technologies (LVT) ordered almost **300 EFOY fuel cells** for use in mobile surveillance technology. The order is worth more than **USD 1.7 million**. As a new customer, LVT already ordered more than **1,100 EFOY fuel cells in 2021**.

22 Feb 2022, Investors, News, Press Release

SFC Energy receives **million-euro order** from Fuel Cell Systems Ltd. for EFOY fuel cells - Fuel Cell Systems **doubles order volume in 2021**.

02 Aug 2022, Investors, News, Press Release

Oneberry Technologies has purchased more than **1.800 EFOY fuel cells to date** for use in numerous applications such as flood early warning systems ... ad-hoc and mobile monitoring

Application Requirements



Focus on environmentally friendly solutions



100% reliable energy supply



Savings in personnel and logistic costs



Long autonomy and low maintenance



Permanent connectivity

How does the EFOY Pro work?

Energy on demand – automatic charging



More on the EFOY fuel cell technology:
<https://www.efoy-pro.com/en/efoy/technology/>

EFOY Fuel Cartridges

High energy density and level of safety

- ⏻ High energy density of fuel cartridges with 1.1 kWh/liter
- ⏻ 1 kWh= 0.9 liter
- ⏻ Child safety lock and safety valve
- ⏻ Certified according to UN3473 for road, sea and air freight



Superior Energy Density of Methanol

Alternative solutions to provide 10 kWh of energy

Methanol

EFOY Pro Fuel Cell (DMFC)



8.5 kg

10 l

Propane

With an SOFC Fuel Cell



27 kg

7,5 l

LiFePO4 Batteries



100 kg

12 l

Lead Batteries



270 kg

140 l

Methanol combines superior energy density with easy handling, shipping and low overall cost

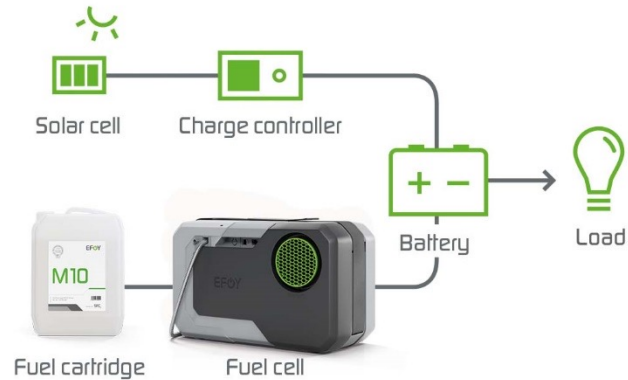
EFOY Fuel Cells

CCTV System setup (Primary Back-up & Hybrid)

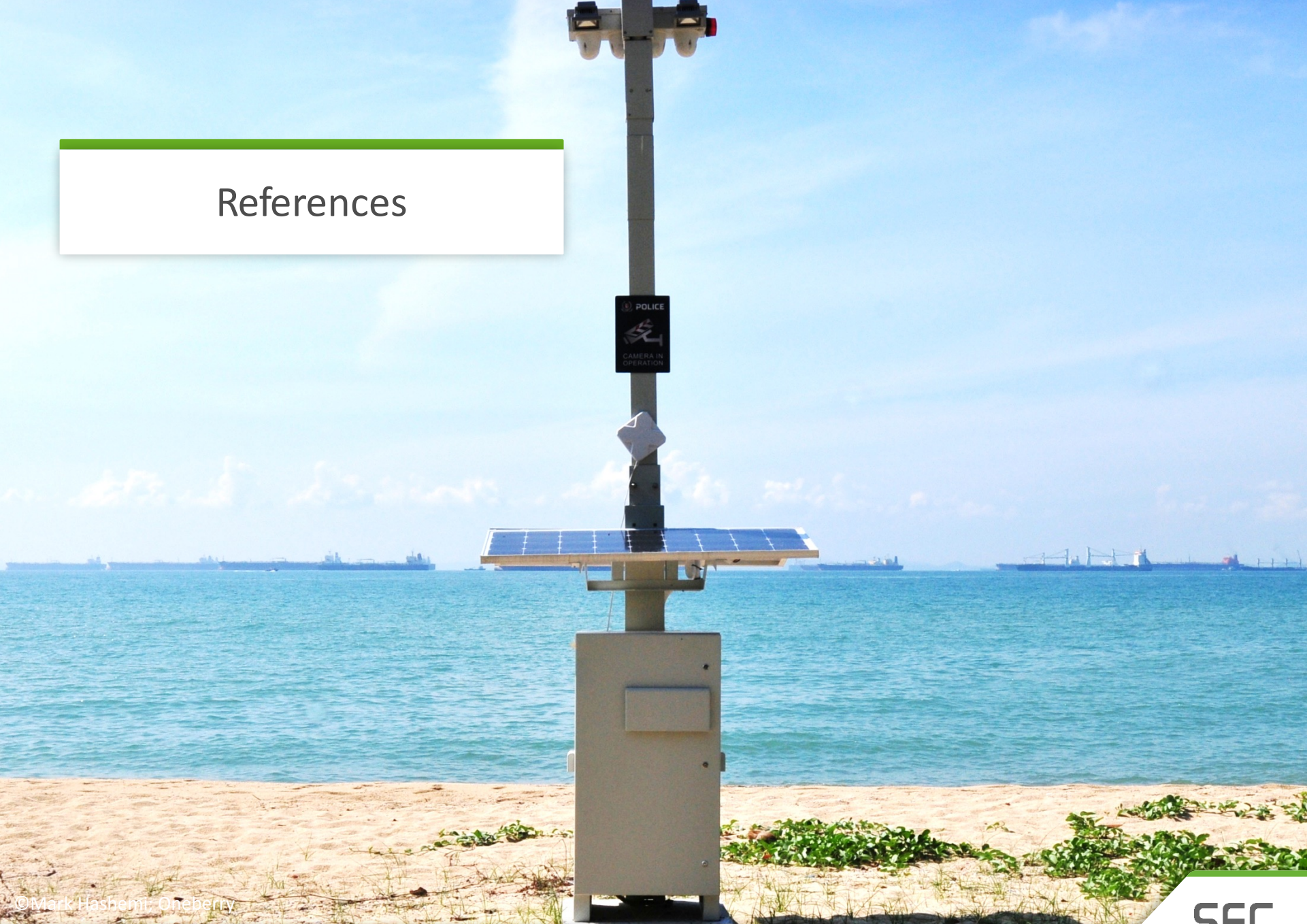
Fuel cell + battery



Fuel cell + solar + battery



References



©Mark Hashemi, Oneberry

Mobile CCTV security – G7 summit



EFOY PARTNER

Wireless CCTV Ltd.

LOCATION

United Kingdom



*Corresponds to New EFOY Pro 2800

CHALLENGE

WCCTV was commissioned to provide 24/7 surveillance of the G7 Summit in Cornwall, UK. The locations where CCTV was needed had no fixed infrastructure to mount a CCTV camera, to run internet cabling or to supply power.

SOLUTION

- 🔋 21x EFOY Pro 2400*
- 🔋 Contained in CCTV Tower
- 🔋 7 day event

«The EFOY Pro allows us to provide temporary and rapid deployment CCTV services in the most remote locations in a cost effective and reliable manner. We have utilised the EFOY Pro fuel cell solution for close to 10 years.»

Daniel del Soldato, Marketing Manager, Wireless CCTV Ltd.

BENEFITS

- 🔋 Cheaper than guards
- 🔋 Optimal CCTV coverage
- 🔋 Around the clock security

Mobile & stationary video monitoring systems



EFOY PARTNER

Oneberry Technology Pte Ltd.

LOCATION

Singapore



*Corresponds to New EFOY Pro 2800

CHALLENGE

High level security is required for an event with over 300,000 spectators in an arena with an immediate periphery totaling five square kilometers requiring short-term and temporary deployment of turn-key CCTV surveillance with multiple entrances and crowd and traffic flow.

SOLUTION

- 🔌 EFOY Pro 2400*
- 🔌 Load: 60W, cont; 12 V for camera, Wi-Fi Router, controller device
- 🔌 16 days of self sufficiency @ 60 W

«We are able to provide a more efficient and autonomous source of power which is 100% reliable and is essential in maximizing data availability.»

Ken Pereira, CEO Oneberry Technology Pte Ltd.

BENEFITS

- 🔌 Autonomous, reliable and quiet source of power
- 🔌 Maximizes data availability
- 🔌 Environmentally friendly

Mobile CCTV – Reliable power for security towers



EFOY PARTNER

Linc Polska Sp. z o.o.

LOCATION

Poland



CHALLENGE

To ensure the reliable operation of the systems, a permanent power supply is essential. The reliably supply of iTower applications with environmentally friendly electricity at any time and in any place is very important.

SOLUTION

- 🔌 EFOY Pro 2800
- 🔌 2 x M28 fuel cartridges
- 🔌 2 x 300 W solar panel
- 🔌 Autonomy: 4 weeks

«With our technical safety solutions, we want to provide our customers with comprehensive situational awareness without burdening the environment. EFOY fuel cells expand the application possibilities of iTowers and give our customers more flexibility.»

Harald Dingemans, CEO of Linc Polska Sp. z o.o.

BENEFITS

- 🔌 More flexibility - Increased run-time
- 🔌 Perfect solution to replace diesel generators
- 🔌 Compliment to solar
- 🔌 Remote Monitoring with EFOY Cloud

Mobile CCTV security – remote off-grid



EFOY PARTNER

LiveView

LOCATION

North America



*Corresponds to New EFOY Pro 2800

CHALLENGE

Often, the deployment sites lack access to the conventional power grid. Supermarket chains place the camera systems in their car parks for monitoring and more efficient use of parking spaces. On construction sites, they take over the function of traditional guards.

SOLUTION

- 🔌 EFOY Pro 2400*
- 🔌 2 x M28 fuel cartridges
- 🔌 1 x 210 Wp solar panel
- 🔌 Autonomy: 20 days without sun

«We are thrilled to partner with EFOY so we can provide rapidly deployed surveillance that is truly capable of operating anywhere on earth—no power, no internet, no problem.»

Derek Boggs, Director of Marketing and Demand Generation, (LVT)

BENEFITS

- 🔌 Increased run-time and fuel efficiency
- 🔌 Low maintenance
- 🔌 Perfect compliment to solar
- 🔌 Easy installation and handling

Mobile CCTV - Rapid Deployment Security Tower



EFOY PARTNER

Funkwerk video systeme GmbH

LOCATION

Germany



*Corresponds to New EFOY Pro 2800

CHALLENGE

For time-limited events such as concerts, the monitoring systems are only used for a short period of time. The surveillance systems used should remain independent of permanently installed power supplies.

SOLUTION


- 🔌 EFOY Pro 2400 Duo*
- 🔌 Telescopic Mast tower solution
- 🔌 2 x M10 fuel cartridges
- 🔌 Optional with solar panels
- 🔌 Autonomy: 4 weeks

«The simple and professional unit convinces us in the various application scenarios where environmental factors such as temperature, noise and exhaust gas behavior are involved.»

Norbert Meißner, Managing Director Funkwerk

BENEFITS

- 🔌 Perfect solution to replace diesel generators
- 🔌 Reliable fuel cell solution
- 🔌 Hybrid power solution with solar
- 🔌 Environmentally friendly

A close-up photograph of an EFoY battery unit installed within a machine. The battery is black and grey, with the EFoY logo and 'LI 105' printed on it. It is connected to a white plastic container via a black cable and a black connector. The machine's interior is metallic and features various components like a terminal block and a black knob.

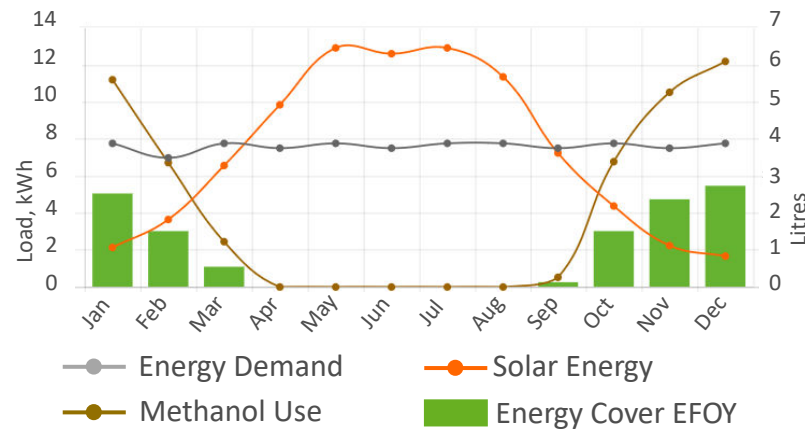
Find more references on
efoy-pro.com/references/

Autonomous & Continuous Off-Grid Energy

EFOY Energy Calculator



Hybrid solar system operation



- With the EFOY Energy Calculator you can precisely calculate your energy demand
- Immediately receive the recommended fuel cell for your energy needs
- Forecast your autonomy and subsequent maintenance schedule
- To the calculator: <https://www.efoy-pro.com/en/service/energy-calculator/>

Simply and effortlessly select your fuel cell system customised to your application

Erik Herrmann
Sales Director
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@ efoy-pro.com

in SFC_Energy_AG

SFC Energy AG
Eugen-Saenger-Ring 7
85649 Brunnthal
Germany



Thank you
for your attention

The Mobile Security Box

**ADD
YOUR OWN
DEVICES**



PIR



**3G/4G
transmission**



**Solar/Fuel
Cells**



Cameras

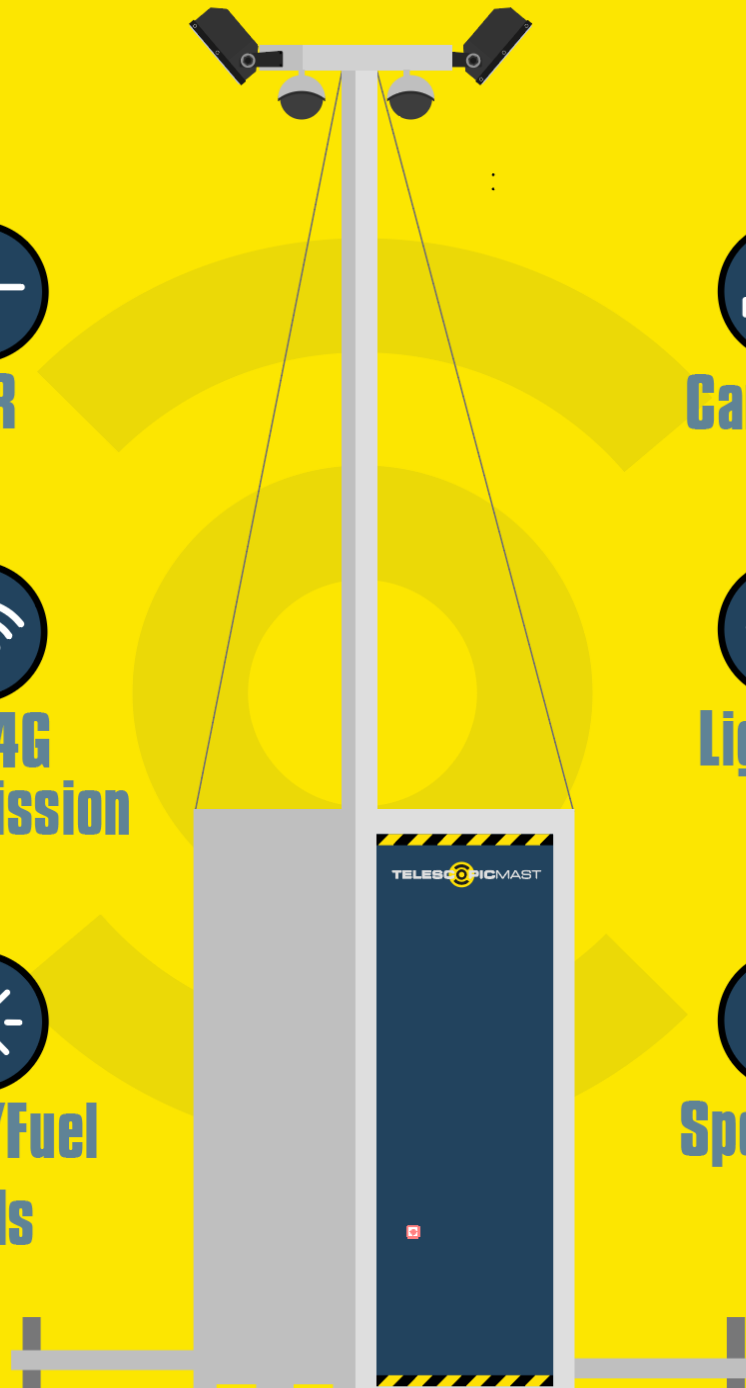


Lighting



Speakers

TELESCOPICMAST



Keynote Hikvision



Gerrit van Weeren
Pre Sales Engineer

Arno Tromp
BDM

HIKVISION

Mobile Tower Solution

HIKVISION®

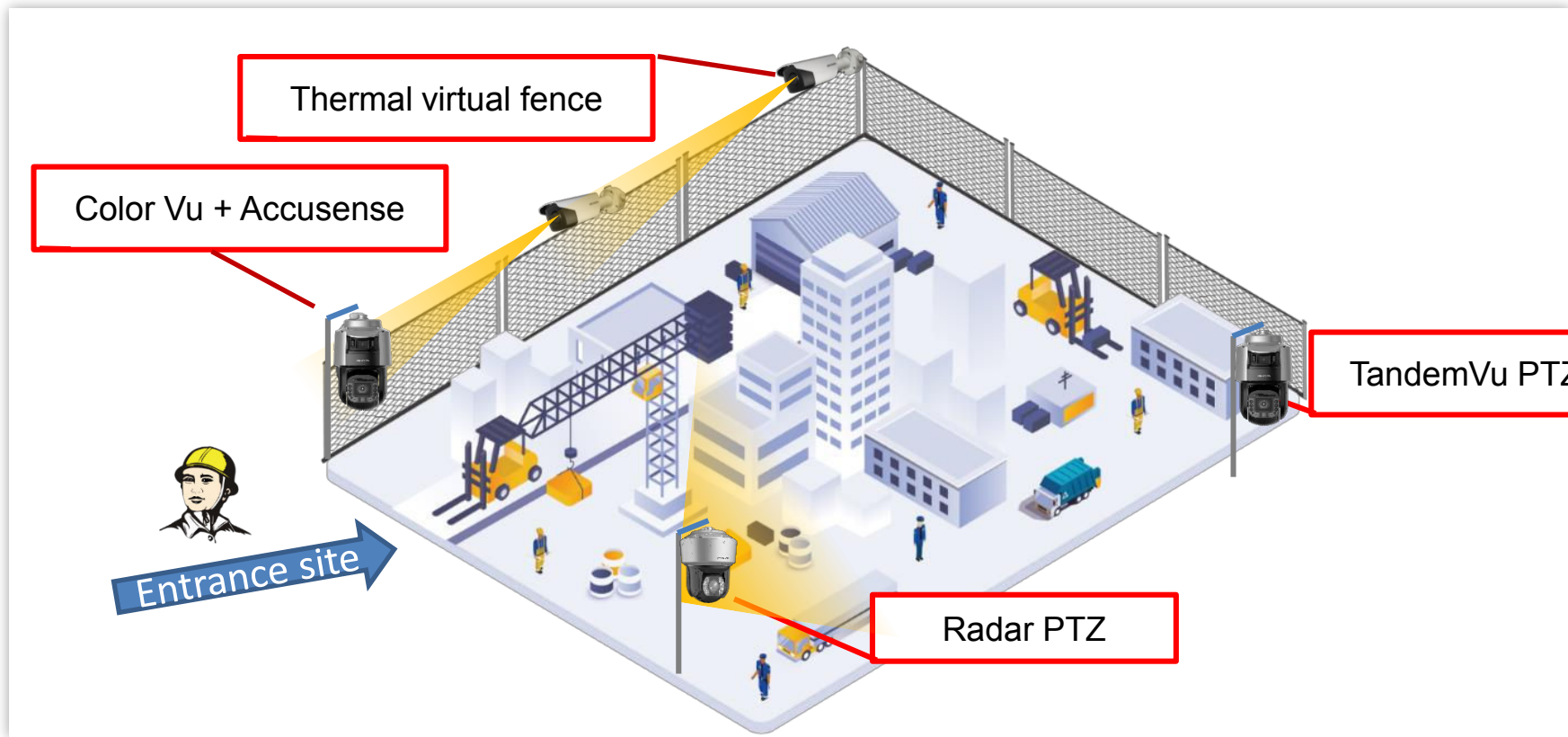


Gerrit van Weeren
Pre-Sales Engineer – Alarm Receiving Center

Arno Tromp
Pre-Sales Engineer – BDM



Temporary and mobile surveillance



Pain Points of Conventional Perimeter Solution

Accuracy Easily Affected by Challenging Environment



Rain



Snow



Windy Day



Darkness



Foggy



Sandstorm

8 MP Panoramic ColorVu Fixed Turret Network Camera

NEW

8 MP Panoramic ColorVu Fixed Turret Network Camera

- High quality imaging with 8 MP resolution
- One image that presents all the scenes covered by the camera
- 24/7 colorful imaging
- Efficient H.265+ compression technology
- Clear imaging against strong back light due to 130 dB WDR technology
- Focus on human and vehicle classification based on deep learning
- Active strobe light and audio alarm to warn intruders off
- Water and dust resistant (IP67)



HIKVISION®

TandemVu PTZ

Big Picture and Details
in One View

Cameras



TandemVu PTZ Introduction



See Far, Go Further

What Should Smart Monitoring be Like?



Step 1 Spot a target

TandemVu can monitor a larger area and find the target faster.



Step 2 Track the target

It can track the target without losing it.



Step 3 Warn the target

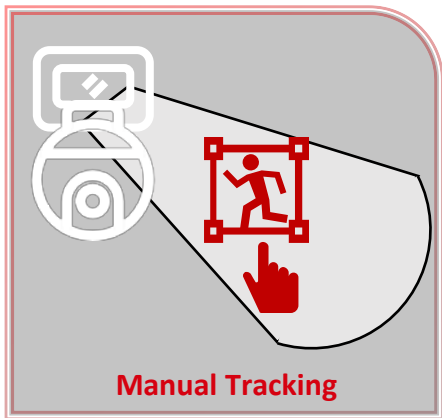
It offers proactive defense, informing the target of detection.



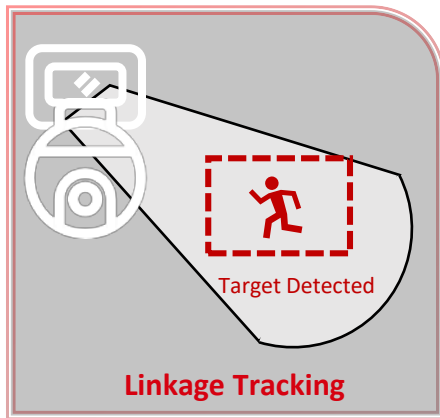
Step 4 Get the evidence

It keeps recorded evidence that is easy to locate for review.

Smart Linkage



Manually select a target and the PTZ lens will track it. This mode has the **highest** priority.

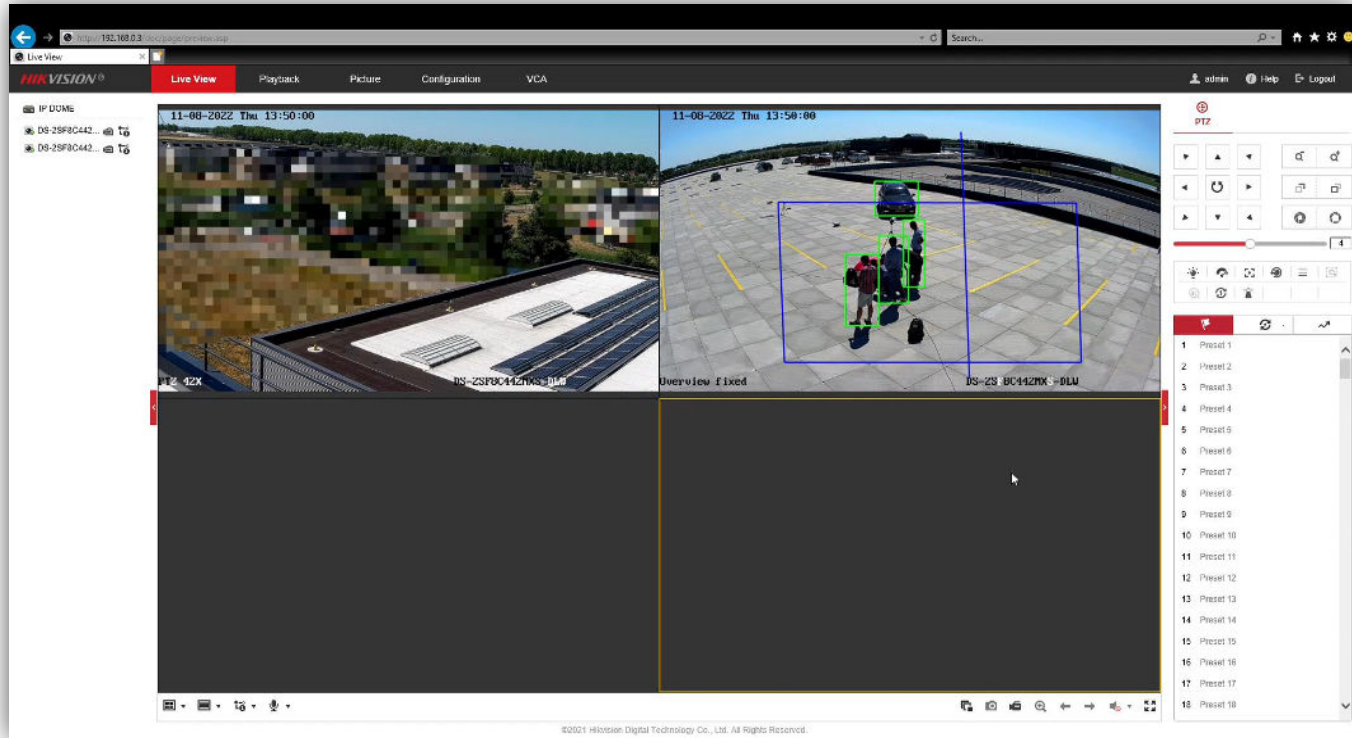


When a target appears in the specific monitoring area of the bullet lens, it will link the PTZ lens to automatically track.



Even if the target has left the monitoring area of the bullet lens, the PTZ lens will continue to track the target.

Smart Linkage Tracking



See Far, Go Further

Visual and Auditory Warnings



Warning! This is a restricted area.
Please exit this area.

¡Advertencia! Esta es un área
restringida, ¡manténgase alejado!

警告! これは立ち入り禁止区域
ですので、遠ざけてください!



Customized Audio

Audio customization is supported.
(Three audio messages)

30-Meter Audio Alarm

Audio alarms can accurately transmit
warning information

30-Meter Strobe Light

The strobe light can give powerful
warnings to targets within range

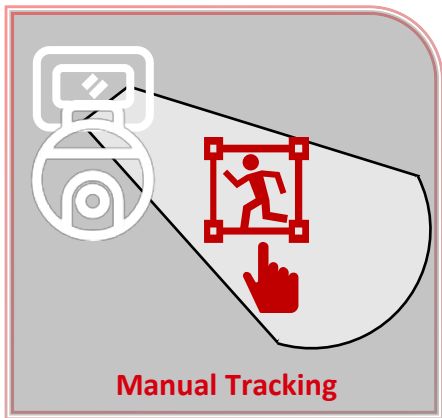
Rapid Focus

PTZ Optics calibration

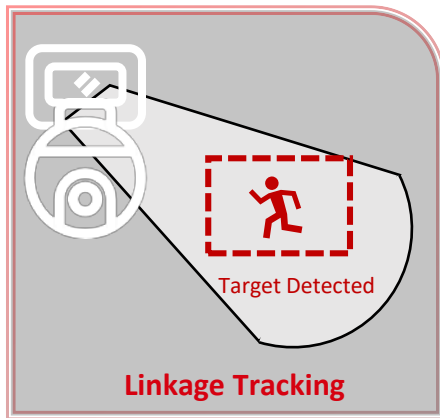
Result after 2 scenes calibration
Mounted on unstable camera pole



Smart Linkage



Manually select a target and the PTZ lens will track it. This mode has the **highest** priority.



When a target appears in the specific monitoring area of the bullet lens, it will link the PTZ lens to automatically track.



Even if the target has left the monitoring area of the bullet lens, the PTZ lens will continue to track the target.

HIKVISION

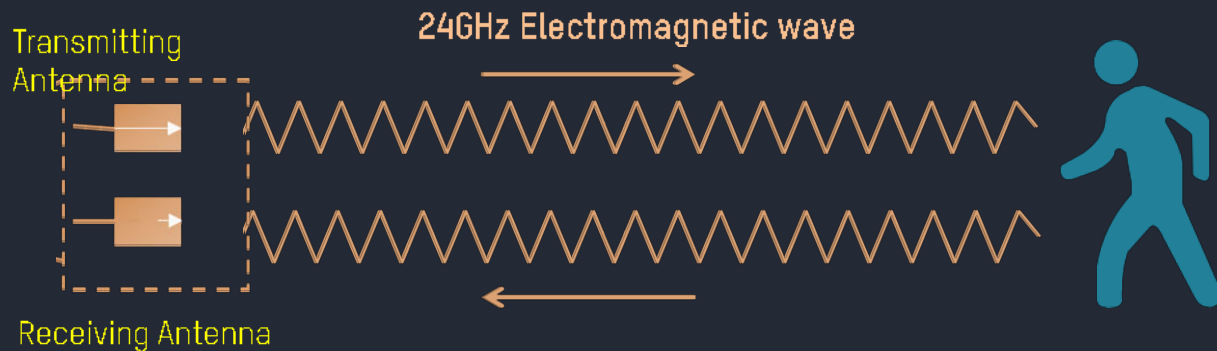
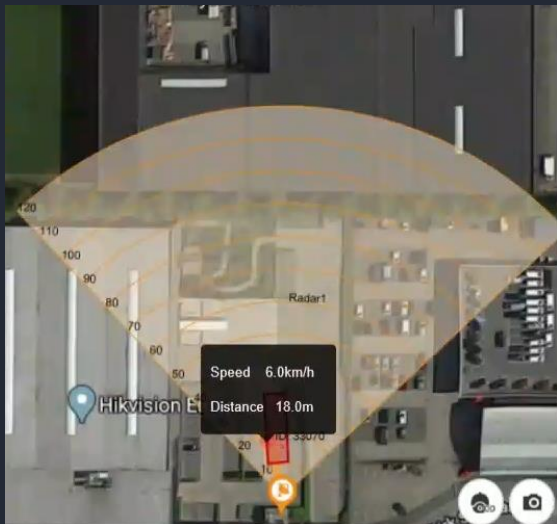


HIKVISION All-in-one Radar PTZ Camera

Looking for all weather approved solution?



Radar Based Intruder Detection



**Alarm triggered according to the comprehensive judgment of trajectory , speed, size.
Performance will not be affected by bad weather and light condition**

Unique Product

HIKVISION
EXPLAINS **LIVE**

All-in-one Design

Built-in Radar



DeepinView PTZ camera

Product Showcase



7 x 24 All-weather Approved

Radar Detection

90° Horizontal Detection Angle
120m for Vehicle Detection
100m for Human Detection

Easy to Deploy

All-in-one design.
Automatic calibration supported.

Video Double Verification

PTZ linked to verify the targets detected by radar and alarm will be generated only triggered by human & vehicle.

Attributes Extraction & Modeling

Support human , vehicle attributes Extraction.
Quick Search by specific attribute[With DeepinMind NVR].

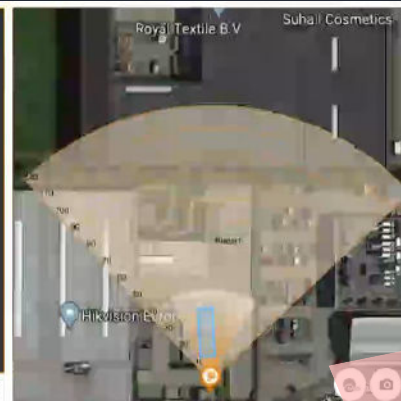
Smart Tracking

Stable tracking focus on human and vehicle.
Multi-target switch tracking
100m Strobe Light Linked to Warn off Intruders



Hikvision Radar PTZ Camera

HIKVISION
EXPLAINS **LIVE**



Perimeter Alarm

Face and Body

	Gender: Male		Gender: Male		Gender: Male
Wear: Yes		Wear: Unknown		Wear: Unknown	
Age Gr: Middle Age		Age Gr: Unknown		Age Gr: Unknown	
Carry: No		Carry: No		Carry: No	
Carry: Yes		Carry: No		Carry: No	
Wear: No		Wear: No		Wear: No	
Wear: No		Wear: Unknown		Wear: Unknown	
Hairstyle: Short Hair		Hairstyle: Short Hair		Hairstyle: Short Hair	

Vehicle Detection

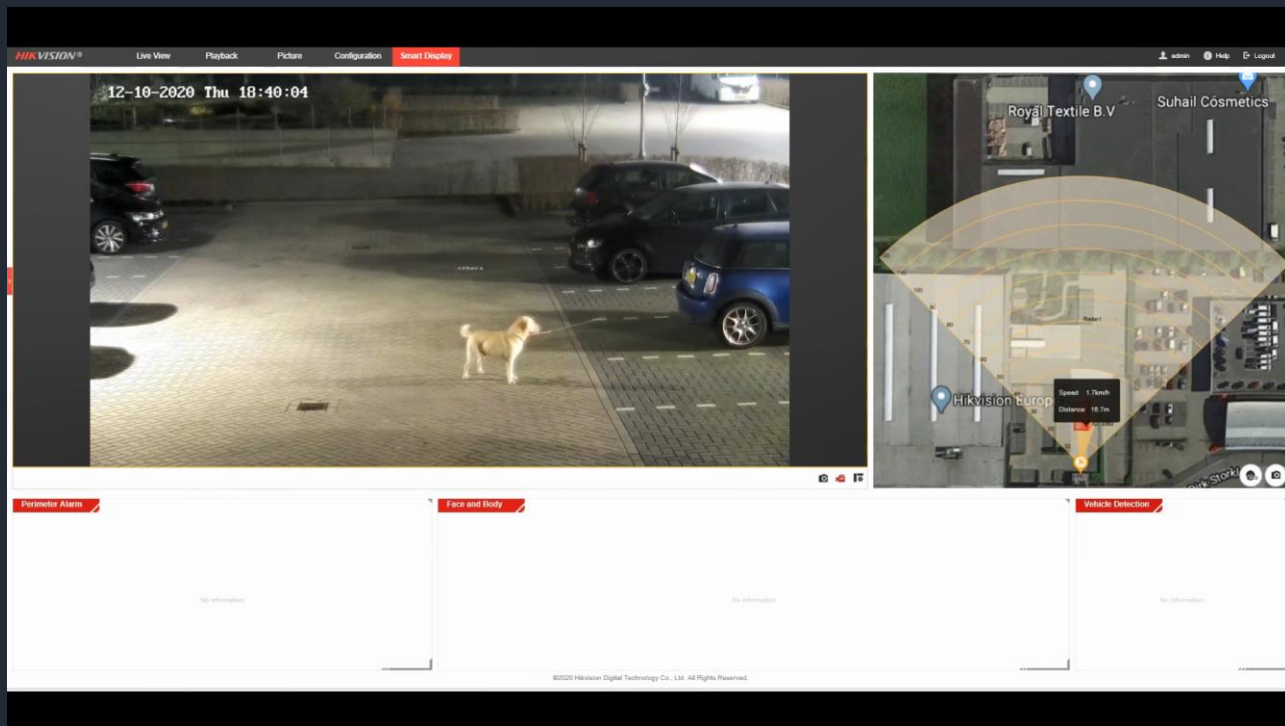
	Plate No: Unknown
	License: Unknown
	Vehicle: Sedan
	Vehicle: Grey
	Plate No: Unknown
	License: Unknown
	Vehicle: SUV/MPV
	Vehicle: Black

See Far, Go Further

Video Double Verification to Minimize False Alarms

Video Double Verification

Recognize and classify targets detected by radar as human/vehicle/others based on deep learning technology



Target Detected by Radar

VCA Triggered in Radar

PTZ Linked

Target Verification by PTZ
(Deep Learning)

NO

Human &
Vehicle

YES

Alarm Triggered

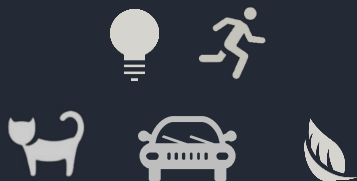
Smart Tracking 3.0 Achieves Stable and Accurate Tracking Performance

What is Smart Tracking 3.0?

Smart-tracking 1.0

➤ Smart-tracking 2.0

Smart-tracking 3.0



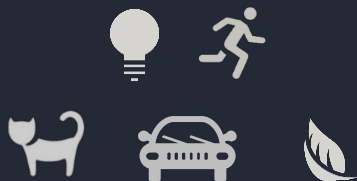
Only triggered by Person & Vehicle

Triggered by all moving objects

- Person/Vehicle Arming Tracking
- Real-time Vehicle & Person modelling
- Upgrade manual tracking algorithm

What is Smart Tracking 3.0?

Smart-tracking 1.0



Triggered by all moving objects

➤ Smart-tracking 2.0



Only triggered by Person & Vehicle

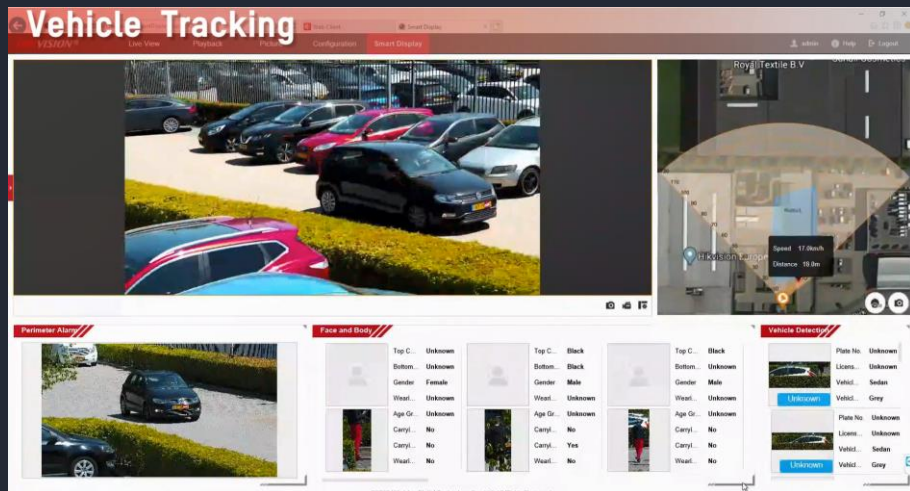
Smart-tracking 3.0



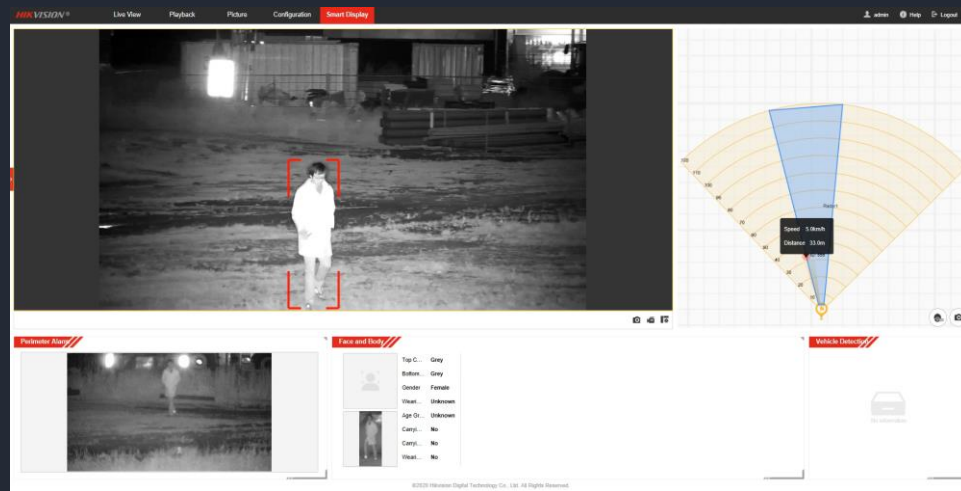
- Person/Vehicle Arming Tracking
- Real-time Vehicle & Person modelling
- Upgrade manual tracking algorithm

Smart Tracking 3.0

When alarm finally generated, PTZ will take over the target and track it accurately and smoothly based on Smart Tracking 3.0 technology. In really poor environment conditions, if the target is not clear, PTZ will based on the position data responded via Radar to track the target.



Human & Vehicle Tracking



Tracking In Nighttime

Smart Tracking 3.0

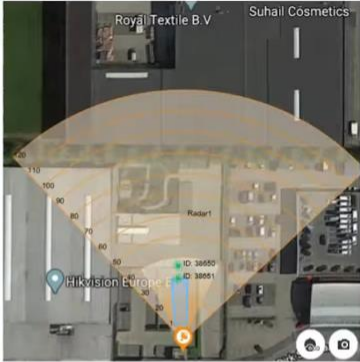



Tracking for Multiple Target.


Maximum 32 targets can be detected by radar at the same time.

HIKVISION® Live View Playback Picture Configuration **Smart Display** admin Help Logout

05-27-2020 Mon 19:02:53



Perimeter Alarm 05-27-2020 Wed 19:30:42




Face and Body

Gender	Male
Wearl...	Unknown
Age Gr...	Unknown
Carryl...	No
Carryl...	No
Wearl...	No
Wearl...	Unknown
Hairstyle	Short Hair

Gender	Male
Wearl...	Unknown
Age Gr...	Unknown
Carryl...	No
Carryl...	Yes
Wearl...	No
Wearl...	Unknown
Hairstyle	Short Hair

Vehicle Detection



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Type here to search

ENG 1902 27/05/2020

Any Other Benefits?

Attributes Extraction & Modeling

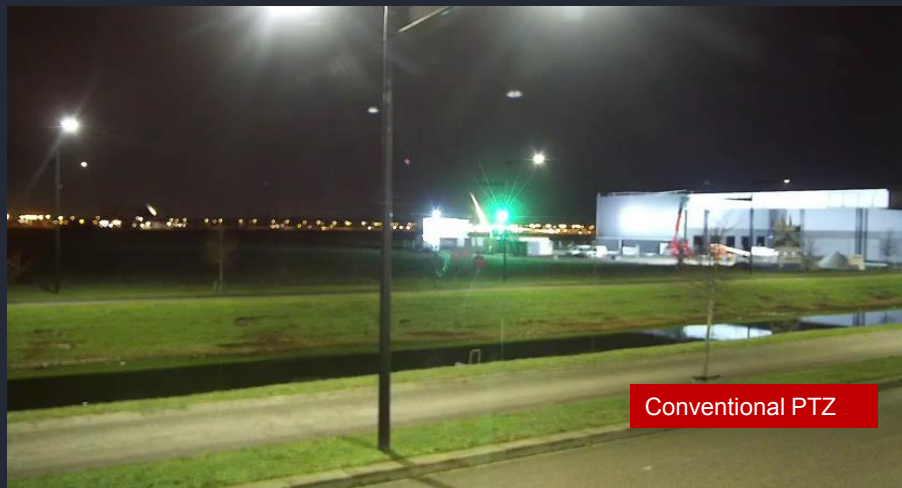
When the using of the smart search function, you can quickly locate the targets you want in massive data, save your time.
(Supported by DeepinMind NVR and HCP1.7)

The screenshot displays the DeepinMind Smart Search interface. On the left is a sidebar with navigation options: Video, Picture, Smart Search (selected), Face Search, Human Body Detection (highlighted in orange), Vehicle Search, and Behavior Analysis. The main area is titled 'Search by Appearance' and 'Search by Picture'. It features a large empty box on the left for image uploads, with a button labeled 'Upload Sample from Local' below it. To the right of this box are search filters: Channel (set to '[D11] IPCamera 11'), Time Segment (Custom, with date range 2020-05-27 12:01:02 to 2020-05-29 23:59:59), Gender (All), Age (All), Tops Color (All), Glasses (All), Backbag (All), Bicycle (All), and Event Type (Human Body Alarm). A blue 'Start Search' button is located at the bottom right of the main area.

Rapid Focus

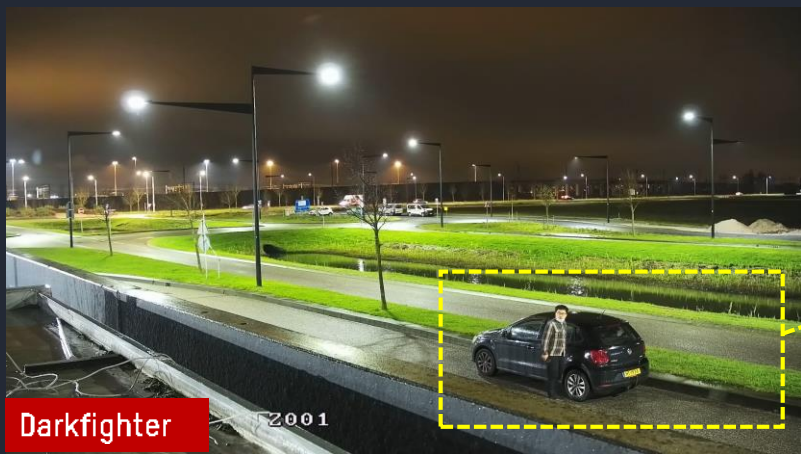
HIKVISION
EXPLAINS **LIVE**

With Hikvision **Rapid Focus** technology, camera focus accurately and fast without delay.



Darkfighter

HIKVISION
EXPLAINS **LIVE**



What is Smart Tracking 3.0?

Smart-tracking 1.0



Triggered by all moving objects

➤ Smart-tracking 2.0



Only triggered by Person & Vehicle

Smart-tracking 3.0



- Person/Vehicle Arming Tracking
- Real-time Vehicle & Person modelling
- Upgrade manual tracking algorithm



IDS-2SR8141XS-AB(40X)

Sap Code: 301315966

- 4MP@60fps
- 40x Optical Zoom
- Darkfighter & 140dB WDR
- Radar Detection Distance: 100m
- Horizontal Detection Angle: 90 Degree
- Max. Detectable Targets: 32
- Video Double Checking Based on Deep Learning

What kind of perimeter solution is suitable for the following application scenarios?

Poor light condition; Long area distance coverage; High requirement for perimeter alarm accuracy



Borderline



Industrial Sites



Construction Sites

Hikvision Thermal

Fog



Optical camera
with Fog



Thermal camera

Hikvision Thermal

Low Light



Optical camera

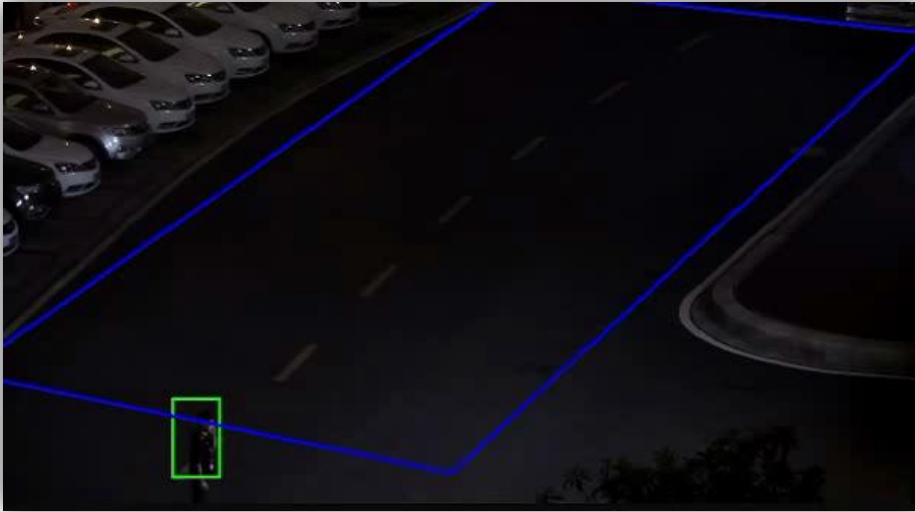


Thermal camera

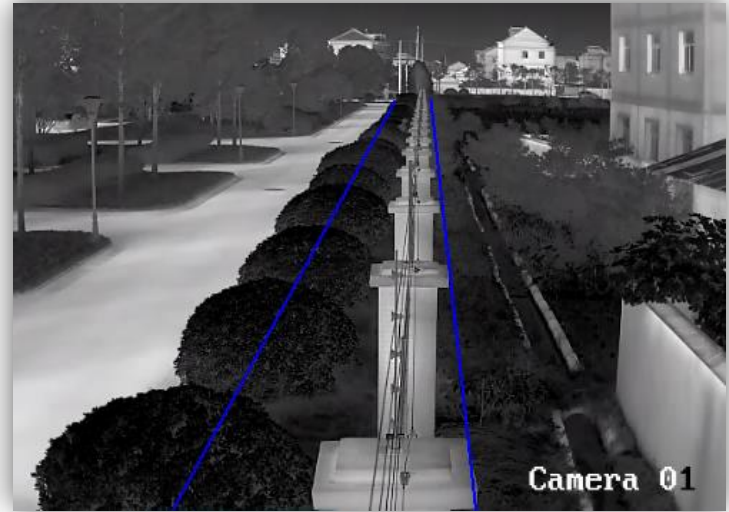
Hikvision Thermal

Low Light

Optical camera lose **contrast** if there is low light



Optical camera



Thermal camera

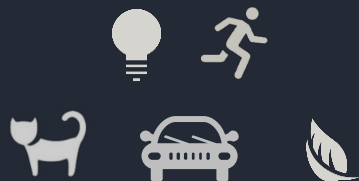
Hikvision Thermal

Backlight



What is Smart Tracking 3.0?

Smart-tracking 1.0



Triggered by all moving objects

➤ Smart-tracking 2.0



Only triggered by Person & Vehicle

Smart-tracking 3.0



- Person/Vehicle Arming Tracking
- Real-time Vehicle & Person modelling
- Upgrade manual tracking algorithm

Hikvision Thermal

Backlight

Thermal camera with backlight



Optical camera



Thermal camera

Hikvision Thermal

Long distance

Thermal can see long distance instead of Optical



Optical camera



Thermal camera

Hikvision basics

Resolution

384*288



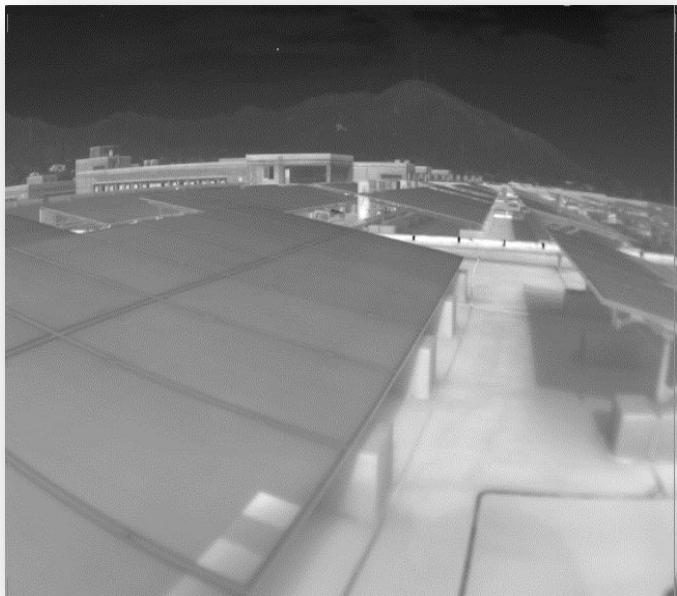
640*512



Hikvision basics

Resolution

640*512



1280x108



Image – Palettes



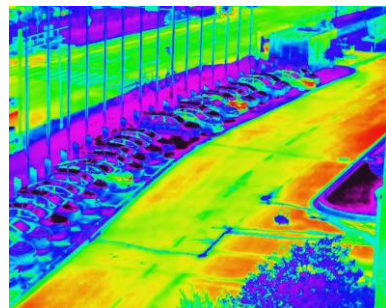
White hot



Black hot



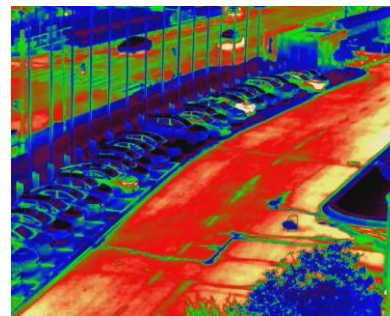
Fusion1



Color 1



Sepia



Rain

HIKVISION

Scene: Trash site in Slovenia - Product: DS-2TD2136





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