

HEAD OFFICE

6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488 South KOREA Tel : 1588-5772
For more information, please visit our website hanwha-security.com

Global Networks

Hanwha Techwin America
Hanwha Techwin Europe
Hanwha Techwin Middle East FZE
Hanwha Techwin Singapore Branch
Hanwha Techwin Russia Office
Hanwha Techwin Hanoi / Ho Chi Minh Office

Scan this QR code to see
details of global network



AI based Traffic Management Solution

Color **RED**

Model **HT230C**

Brand **HTV**

Type **SUV**

LP/NP **HT-777-WS**



WISeNET Road AI

PNV-A9081RLP, PNO-A9081RLP, PNB-A9001LP

- Wisenet Road AI application (Pre-installed)
 - License/Number Plate Recognition
 - Make/Model/Color Recognition
 - Black/White list notification
 - Smart Search (LP/NP, Country, brand, model, color)

© 2021 Hanwha Techwin Co., Ltd. All rights reserved.

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE
Under no circumstances, this document shall be reproduced, distributed or changed,
partially or wholly, without formal authorization of Hanwha Techwin Co., Ltd.
* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

08-2021 (M.H)

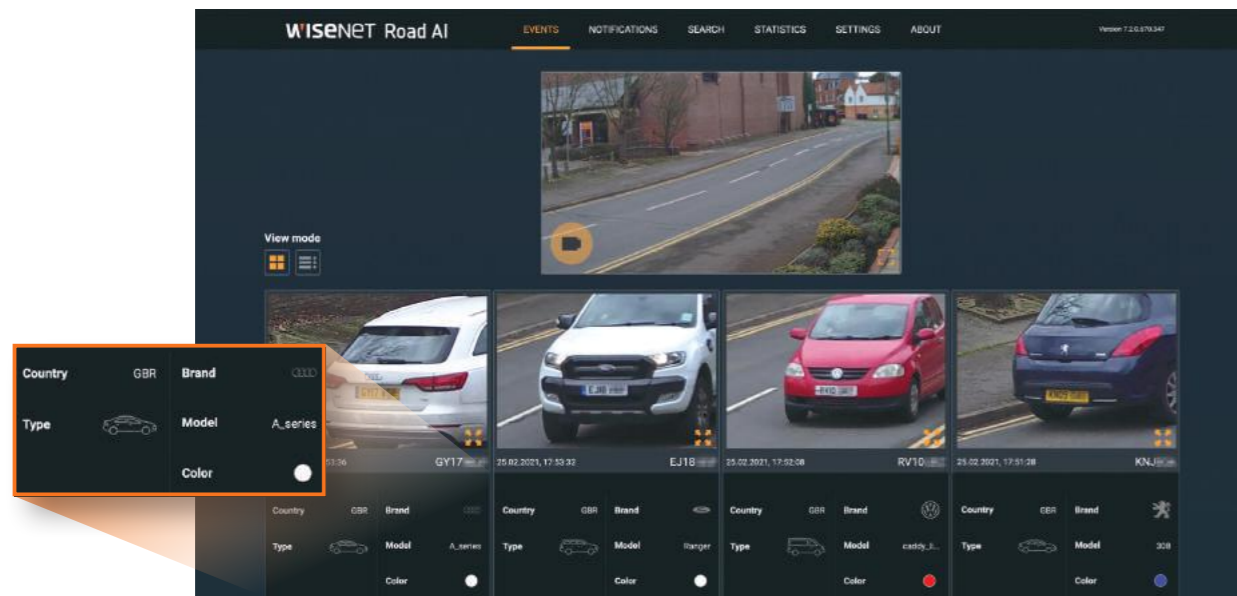
Hanwha-Security.com

Intelligent traffic management solutions

With powerful edge AI, Hanwha Techwin offers suite of LPR (License Plate Recognition)/ANPR (Automatic Number Plate Recognition)/MMCR (Make, Model, Color Recognition) solutions ranging from car park access control for business applications, through to large scale city wide based systems, which enable local authorities and police to keep people safe.

Accurate AI based LPR/ANPR and MMCR

The Wisenet Road AI application, which provides a highly accurate License/Number plate recognition and MMCR solution, has been integrated with Wisenet AI cameras: PNV-A9081RLP, PNO-A9081RLP and PNB-A9001LP.



- **LP(License Plate)/NP(Number Plate) Recognition**

Through OCR (Optical Character Recognition) processing, the BestShot images of the License/Number plates are converted into machine-readable text and numbers.

- **MMCR (Make, Model, Color Recognition)**

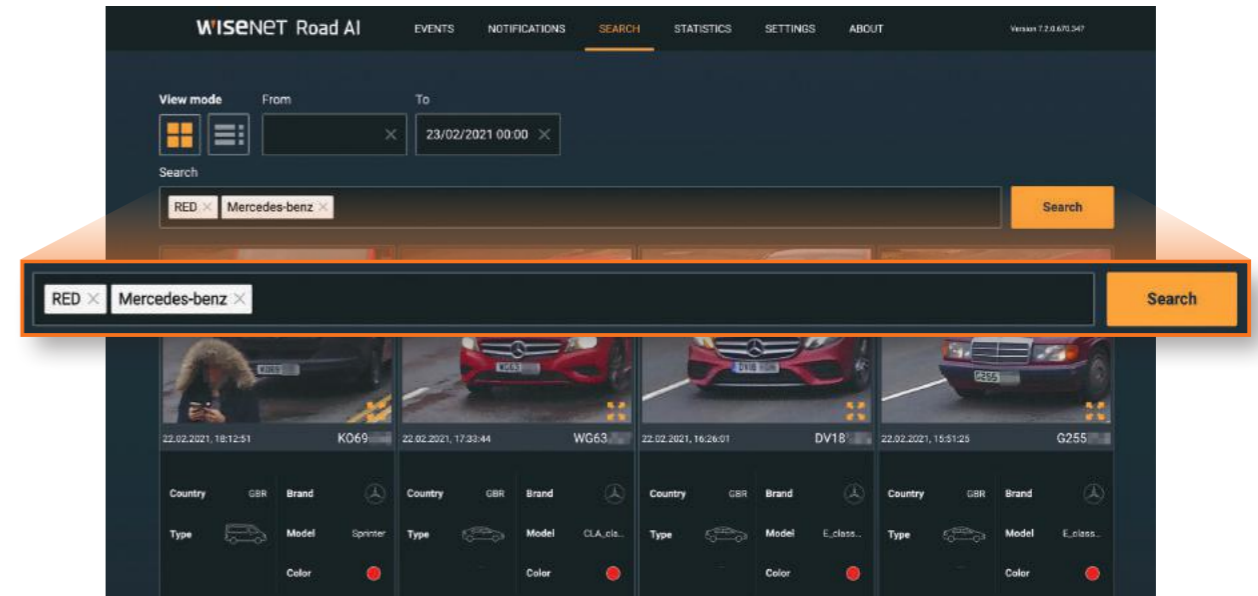
Powerful AI deep learning algorithm allows recognition of vehicle brands, models, and colors.

- **Vehicle type recognition**

Vehicles are classified into 7 types (CAR, SUV, VAN, LCV, TRUCK, BUS, Motorcycle) is also collected for easy and efficient events/object search.

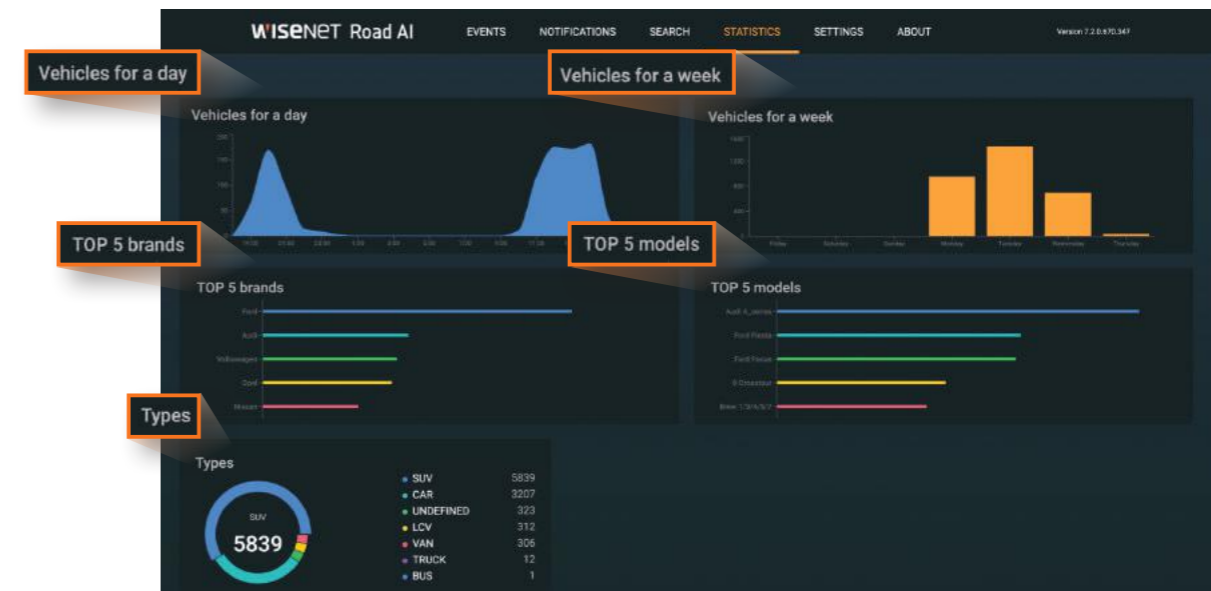
Efficient Smart Search

Search by various options as country, make, model, color etc. Search results are shown max 500 list and can be exported as excel format.



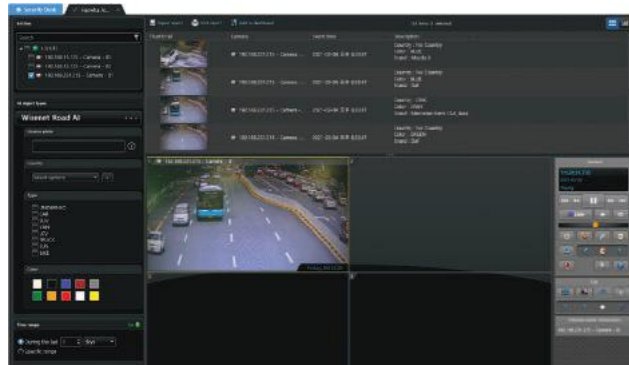
Insightful Statistics

Wisenet Road AI supports various widgets and visual graphs with different parameters to display daily, weekly and monthly traffic statistics. The statistics utilizes the latest 10,000 cars added to the DB.

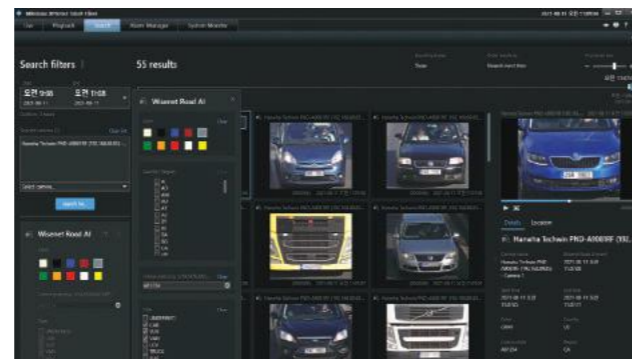


VMS integration

Wisenet Road AI offers seamless integration with various VMS such as Genetec, Milestone and Wisenet Wave, Wisenet SSM. The flexibility of integration gives boundless potential to be applied at any project to fulfill various customers needs.



with Genetec



with Milestone

Available Countries

Albania, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Czechia, Denmark, Estonia, Finland, France, Greece, Germany, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Montenegro, North Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Spain, Switzerland, Turkey, United Kingdom, United States of America, Canada, Russian Federation, Azerbaijan, Uzbekistan, Ukraine, Kyrgyzstan, Kazakhstan, Tajikistan, Georgia, Turkmenistan, Australia, New Zealand, Hong Kong, Indonesia, Vietnam, Taiwan, Bahrain, Kuwait, Oman, Qatar, KSA (Kingdom of Saudi Arabia), UAE, South Africa

* Supported features may vary by region. Please contact your regional manager for more details.
Every country listed above will be supported through a Wisenet Road AI application update scheduled in December 2021.

Specification



PNV-A9081RLP
4K AI IR LPR Vandal Dome Camera



PNO-A9081RLP
4K AI IR LPR Bullet Camera



PNB-A9001LP
4K AI LPR Box Camera

Imaging Device	1/1.8" CMOS		
Min. Illumination	Color : 0.05Lux(F1.6, 1/30sec), BW : 0Lux(IR LED on)		Color : 0.03Lux(F1.2, 1/30sec)
Video Output	CVBS : 1.0 Vp-p, Micro USB Type B		
Focal Length	4.5~10mm(2.2x) motorized varifocal		-
Angular Field of View	H : 101.4°(Wide)~45.5°(Tele) / V : 53.6°(Wide)~25.5°(Tele) / D : 120.7°(Wide)~52.3°(Tele)		-
Pan / Tilt / Rotate	0°~360° / -45°~85° / 0°~355°		-
IR Viewable Length	30m(98.42ft)		-
Day & Night	Auto(ICR)		
Wide Dynamic Range	120dB		
Digital Noise Reduction	SSNRV		
Digital Image Stabilization	Support(built-in gyro sensor)		
Analytics	Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection		
Alarm I/O	1/1		
Audio I/O	Line in / Line out		
Resolution / Max. Frame Rate	8MP/30fps		
WiseStream	WiseStream II		
Streaming	Up to 3 profiles		
Edge Storage	Micro SD/SDHC/SDXC		
Application Programming Interface	ONVIF Profile S/G/TSUNAPI(HTTP API) Wisenet open platform		
Operating Temperature	-40°C ~ +55°C(-40°F ~ +131°F) * Start up above -10°C		-10°C ~ +55°C(+14°F ~ +131°F)
Certification	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP66/IP67, IK10, NEMA4X	-
Power Consumption	PoE+ : Max 20.00W, typical 17.00W 12VDC : Max 18.70W, typical 15.00W	PoE+ : Max 20.00W, typical 17.00W 12VDC : Max 18.00W, typical 16.00W	PoE+ : Max 16.50W, typical 12.50W 12VDC : Max 13.50W, typical 10.80W
LPR/ANPR/MMCR			
Speed Description	Moderate speed/Low speed		High speed/Regular speed
Speed limit	Up to 70kmh (45mph)/Up to 40kmh (25mph)		Up to 140kmh (90mph)/Up to 100kmh (65mph)
Min. Forward Distance	12m (38ft)/10m (33ft)		27m (90ft)/16m (52ft)
Max. Forward Distance	17m (55ft)/16m (52ft)		46m (150ft)
Max. Horizontal Angle	25°/30°		15°/25°
Max. Vertical Angle	25°/30°		15°/25°
Horizontal Offset	Up to 5m (18ft)/Up to 7m (24ft)		Up to 4m (12ft)/Up to 7m (24ft)
Camera Height	Up to 5m (18ft)/Up to 7m (24ft)		Up to 7m (24ft)
Lane Coverage	Up to 2 lanes		
Vehicle Recognition	Make : 70+ / Model : 600+ / Color : 10		

MEMO

MEMO