

A Trusted and Reliable Solution Provider of Transport Surveillance

VIVOTEK is a premium brand in the global security market and an expert in IP surveillance dedicated for transportation applications. With offices and representatives around the world and strong partnerships with leading system integrators, VIVOTEK provides timely project and technical support for a wide range of transport-related applications.

VIVOTEK develops comprehensive security systems encompassing a specialized range of onboard and wayside

cameras, recording and network equipment, software platforms, and people counting solutions. To date, an ever-growing number of successful deployments around the globe demonstrate the excellent fit of VIVOTEK's solutions for applications including rolling stock and vehicles onboard systems, passenger stations and terminals, level crossings, and wayside monitoring.



Indonesia
Commuter Line



Saudi Arabia
Metro Stations



Poland
Intercity Trains



France
High Speed Trains



Italy
Sicily Trains



Hungary
City Buses



Italy
Intercity Coaches



Malaysia
LRT Stations



Spain
Police Cars



France
Angers Trams



Australia
Train Stations



Turkey
Fire Trucks



Brazil
Sao Paulo Rail



South Africa
Freight Trains



Mexico
Mexico City
Metro



China
High Speed
Railways



Czech Republic
Municipal Trams



Taiwan
Airport Skytrain



Brazil
Rio Light Rail



USA
Freight
Locomotives



Turkey
Konya Trams



Thailand
Metro Stations



Germany
Local Trains



Poland
Railway Crossings



Transportation Solution

Onboard, Wayside, and Stations Surveillance





Reliable Transportation Monitoring Systems

A high-quality video monitoring system is crucial for ensuring passenger safety in all modes of public transport. Onboard and wayside surveillance serve many purposes: they act as a deterrent preventing crime; allow security personnel to react swiftly to any irregularities; and provide recordings for post-event analysis to help identify culprits. Extended functionalities of a system may include operational awareness for maneuvering, accurate passenger counting, and emergency video communication.

Fully cognizant of the complexity and specialized requirements of transportation projects, VIVOTEK offers a growing portfolio of certified products equipped with dedicated features and functionalities. VIVOTEK Transportation Solution portfolio allows users to build highly reliable, advanced systems perfectly suited for use in mass transportation.



Extended Solution Portfolio

Adding to the numerous types of cameras and recording equipment needed to build a comprehensive monitoring system, VIVOTEK also offers a scalable integration-ready software platform and advanced edge analytics, helping to transition everyday transportation surveillance systems into the smart IoT era.



Reliability and Rugged Design

VIVOTEK Transportation Solution equipment is built and tested to endure harsh environmental conditions including extreme temperatures, heavy precipitation, mechanical impact, electromagnetic interference and vibrations. All models feature streamlined rugged metal housings with high IP and IK ratings to ensure maximum reliability for security monitoring.



Industry Standards and Certifications

VIVOTEK products designed for transport applications are compliant with the strictest norms and regulations required by international law and transportation authorities, including tests for fire and smoke, humidity and temperature, shock and vibrations, and electromagnetic interference. Devices designed for in-vehicle onboard use are certified to EN50155 standard for electronic equipment for rolling stock, as well as other key vehicle-related norms.



Specialized Functionalities

VIVOTEK Transportation Solution products come with numerous advanced features created specifically to resolve key issues commonly encountered in transport projects. Smart-edge devices with intelligent features like People Counting or Tampering Detection allow for functionality beyond regular surveillance.



Design Flexibility and Customizations

In order to satisfy the unique needs of our customers in the transportation sector, VIVOTEK offers great flexibility of product customizations. Combining any lens, cabling options or more complex firmware and hardware modifications, our project consultants are ready to offer a solution based on individual project needs.



Long-term Product Support

With full consideration of the long-term perspective of transportation deployments, VIVOTEK carefully plans products life-cycle and ensures compatibility of future product generations with regard to technical specifications and dimensions in order to streamline project maintenance.

Get On Board with VIVOTEK Transportation Solution

P.5 Rolling Stock

Onboard Surveillance Systems
Dedicated for Rolling Stock

P.9 Passenger Station

Surveillance Systems for Passenger
Stations and Terminals

P.11 Railway Crossing and Infrastructure

Monitoring Systems for Level Crossings and
Railway Infrastructure

P.7 Vehicles

Onboard Surveillance Systems
Dedicated for Vehicles

Enhanced Security Onboard Rolling Stock

Exterior and Interior Monitoring • Passenger Counting • Emergency Communication

Beyond security monitoring aimed at ensuring passenger safety, onboard video monitoring systems prove highly useful in rolling stock operations and maneuvering, providing drivers with direct views from the front and the rear of a vehicle, as well as allowing for status control of doors, tracks,

coupling mechanisms, and pantographs. Purpose-built VIVOTEK mobile models are equipped with a range of functionalities specifically designed for such applications, making them the perfect fit for railway scenarios.



Driver's Cabin



MD8565-N

- Invisible IR
- Compact Size



FE9582-EHNV

- 360° View
- Invisible IR



Side View



Pantograph View



MD8564-EH

- Extreme Durability
- IR Illumination
- De-icing



Front and Rear View



Track and Coupling



MD8563-EH/DEH

- WDR Pro
- Fast Auto Exposure
- Video Rotation



MD9561-H

- 60 Fps
- WDR Pro
- IR Illumination



Carriage Interior



FE9391-EV

- 360° View
- 4K Resolution
- IR Illumination



MD8563-EH/DEH

- Full HD Resolution
- Tampering Detection



Automatic People Counting



SC8132

- High Accuracy
- Video Stream



SC8133

- High Accuracy
- Video Stream
- Built-in LEDs



Core System



VAST 2 Platform

- Live View and Recording
- Events and Alarms



NV9311P/9411P

- Live View and Recording
- Integrated GPS/WiFi/4G



Fast Auto Exposure



Invisible IR



EN50155 Certification



EN45545 Compliance



M12 Connectors



Wide Temperature Range

Effective Security for Buses and Trucks

Road and Interior Monitoring • Passenger Counting • Route Tracking

VIVOTEK Transportation Solution can be deployed onboard a full range of vehicles including: buses and trolley buses used in mass transit; fleets of trucks, tankers, and special purpose vehicles such as police cars, fire-trucks, and ambulances. High-quality video monitoring used for safety

reasons and overall situational awareness can be further extended with the addition of features such as passenger counting or GPS tracking, empowering users to boost onboard security and receive valuable passenger flow data for route schedule and ticketing optimization.



Driver's Seat



- MD8565-N**
- Invisible IR
 - Compact Size



- FE9582-EHNV**
- 360° View
 - Invisible IR



Front and Rear View



- MD8563-EH/DEH**
- WDR Pro
 - Fast Auto Exposure



Side and Door View



- MD8564-EH**
- Extreme Durability
 - IR Illumination



- MD8563-EH/DEH**
- WDR Pro
 - Video Rotation



Vehicle Interior



- MD8563-EH/DEH**
- High Resolution
 - Tampering Detection



- MD8565-N**
- Compact Size
 - IR Illumination



- FE9381/2-EHV**
- 360° View
 - IR Illumination



Automatic People Counting



- SC8132**
- High Accuracy
 - Video Stream



- SC8133**
- High Accuracy
 - Video Stream
 - Built-in LEDs

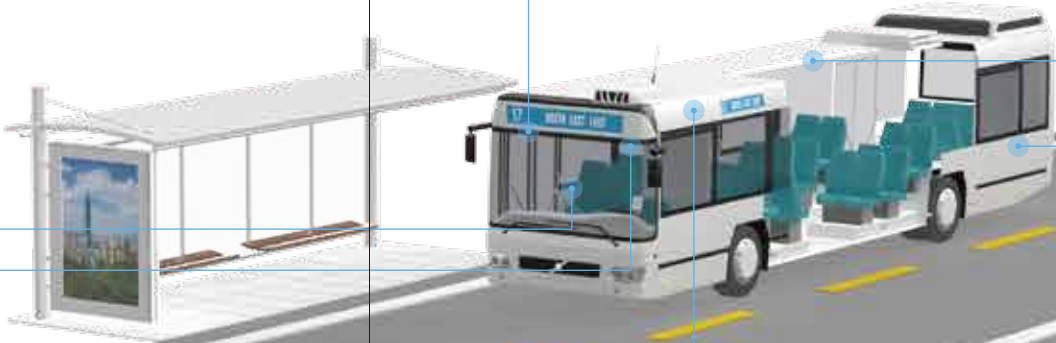


Core System



NV9311P/9411P

- Live View and Recording
- Integrated GPS/WiFi/4G



Network and Power



- AW-IHT-0602**
- M12 Connectors
 - PoE Power



Control Room



- VAST 2 Platform**
- Route Tracking
 - Events and Alarms



Video Rotation



WDR Pro



E-Mark Certification



Extreme Weatherproof Design



Vandal-proof Design



Tampering Detection

Ensuring Passenger Safety at Stations and Terminals

Scalable Monitoring Systems • Advanced Event and Alarm Management • Edge Analytics

A full spectrum of VIVOTEK's advanced monitoring and recording equipment can be used to efficiently secure every corner of transit area surroundings. With unified integration-ready platform, high resolution live feeds enable security staff to react immediately to any potential threat,

while stored recordings allows for forensic post-incident analysis. Advanced edge analytics further enhance systems capabilities, providing useful data for passenger flow optimization and effective space allocation.



Waiting Hall



- FE9391-EV**
- 360° View
 - 4K Resolution
 - Crowd Detection



- FD9391-EHTV**
- 4K Resolution
 - Smart Motion Detection



- SD9161-H**
- PTZ Capabilities
 - Auto Tracking



Platform



- SC8131**
- Zone Counting
 - Video Stream



- IZ9361-EH**
- Long-range Zoom
 - IR Illumination



Parking



- MS8391-EV**
- Wide Coverage
 - High Resolution
 - IR Illumination



Entrance



- SC8131**
- People Counting
 - Video Stream



- MS9390-HV**
- 180° View
 - High Resolution
 - IR Illumination



ATM Digital Signage



- VC8101**
- Pinhole Size
 - Discreet Profile
 - Split-build



Ticket Counters



- CC8371-HV**
- 180° View
 - Vandal-proof
 - IR Illumination



Control Room



- VIVOTEK ND/NR NVR**
- Live View and Recording
 - Scheduled Backup



- VAST 2 Platform**
- Video Wall Setup
 - System Redundancy



Network and Power



- VIVOTEK PoE Switch**
- Industrial SFP/Ethernet
 - Advanced Management



Panoramic View



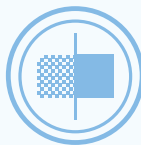
P-iris Lens



VADP Platform



Edge VCA



Smart Stream II



Video Wall

Keep a Keen Eye on Rail Crossings and Infrastructure

Wide Area Monitoring • Key Infrastructure Security • Intelligent Detection

VIVOTEK Transportation Solution portfolio features the right equipment to keep important railway equipment safe, level crossings secured, and wayside areas properly monitored. With robust outdoor-ready models fitted with long-range

zoom and IR illumination capabilities, powered by industrial-grade network equipment, efficient and reliable surveillance can be achieved for any transport application.



Road



IP9165-LPC Kit

- License Capture
- Two-lanes Coverage



IP9191-HP

- 120 Fps
- Lens/Enclosure Options



Key Infrastructure



IB9365-EHT

- Remote Focus
- Smart Motion Detection
- Wide Temperature



Monitoring Station



VIVOTEK ND/NR NVR

- Live View and Recording
- Scheduled Backup



VAST 2 Platform

- Video Wall Setup
- System Redundancy



RAILS



IZ9361-EH

- Long-range Zoom
- IR Illumination



Level Crossing



MA8391-ETV

- Adjustable Views
- Ultra High Resolution



FE9391-EV

- 360° View
- 4K Resolution
- IR Illumination



Perimeter



SD9366-EH

- PTZ Capabilities
- IR Illumination
- Patrol Mode



Network and Power



VIVOTEK PoE Switch

- Industrial SFP/Ethernet
- Advanced Management



VIVOTEK Cabinet

- High Durability
- Accessories choice



Vari-angle IR



Long-range Zoom



Supreme Night Visibility



Electronic Image Stabilization



Remote Focus



3D Noise Reduction

Onboard Systems

Product Lineup

Type	MD Series				FE Series	SC Series
						
Model Name	MD8563-EH/DEH	MD8564-EH	MD8565-N	MD9561-H	FE9381-EHV FE9382-EHV FE9582-EHNV FE9391-EV	SC8132 SC8133
Resolution	30 fps @ 1920x1080	30 fps @ 1920x1080	30 fps @ 1920x1080	60 fps @ 1920x1080	30 fps @ 1920x1920 20 fps @ 2816x2816 (-391)	30 fps @ 1280x960
Max. Streams	4 Streams	4 Streams	4 Streams	4 Streams	4 Streams	3 Streams
Mode	Day	Day&Night, 30M IR	Day&Night, 10M Invisible IR	Day&Night, 10M IR	Day&Night 10M Invisible IR (-582) 20M IR (-382, 391)	Day Counting (-32) Day/Night Counting (-33)
WDR Technology	WDR Pro	WDR Pro	WDR Enhanced	WDR Pro	WDR Pro	WDR Enhanced
Housing	Metal, IK10, IP67	Metal, IK10+, IP68, IP6K9K, NEMA 4X	Metal, IK10, IP66, NEMA 4X	Metal, IK10, IP67, NEMA 4X	Metal, IK10, IP66	Metal, IK10, IP66
Certifications	EN50155 TX (-63,-64), EN50155 T1 (-61, -65, FE, SC), EN50121-3-2, EN61373, EN45545, E-mark (DC versions)					
Operating Temperature	-40°C - 70°C	-40°C - 70°C	-25°C - 55°C	-25°C - 55°C	-40°C - 55°C	-25°C - 55°C
Power Input	PoE (-EH) DC (-DEH)	PoE + DC (De-icing)	PoE, DC	PoE	PoE, DC	PoE, DC
Dimensions (mm)	129 x 107 x 54	242 x 162 x 82	Ø 110 x 57	110 x 98 x 52	Ø 145 x 50 (-81) Ø 160 x 51 (-82)	160 x 79 x 31



Model Name	VAST 2 Platform	NV9311P/9411P	AW-IHT-0602
Description	• Live View and Recording • Alarm and Event Management • GPS Data Integration • Integration with IP-based Systems	• 8CH/16CH, RJ45/M12 • Built-in GPS, G-sensor • Built-in PoE, Ignition Control • Optional WiFi/3G/4G	• 4 x FE M12 PoE • 2 x FE M12 • PoE Total 120W • DC 24V-56V

Wayside and Station Systems

Product Lineup

Type	IZ Series	SD Series	MS Series	MA Series	LPC Kit	SC Series
						
Model Name	IZ9361-EH	SD9161-H SD9366-EH	MS9390-HV MS8391-EV	MA8391-ETV	IP9165-LPC Kit	SC8131
Resolution	30 fps @1920x1080	30 fps @ 1920x1080 (-61) 60 fps @ 1920x1080 (-66)	30 fps @ 4512x1728 (-90) 7 fps @ 7552x1416 (-91)	7 fps @ 2048x1536, 4 Adjustable Views	60 fps @ 1920x1080	30 fps @ 1280x960
Max. Streams	4 Streams	4 Streams	4 Streams	4 Streams	4 Streams	3 Streams
Mode	Day&Night, 150M IR	Day&Night (-61) Day&Night, 250M IR (-66)	Day&Night, 20M IR (-90) Day&Night, 30M IR (-91)	Day&Night	Day&Night, IR Pass Mode	Day
Zoom	20X	10X (-61) 30X (-64)	-	-	-	-
WDR Technology	WDR Pro	WDR Pro	WDR Pro (-90) WDR Enhanced (-91)	WDR Enhanced	WDR Pro II	WDR Enhanced
Housing	Metal, IK10, IP67, NEMA 4X	Metal (-61) Metal, IK10, IP66, NEMA 4X (-66)	Metal, IK10, IP66	Metal, IK10, IP66	Metal, IK10, IP68	Metal
Operating Temperature	-50°C - 60°C	-10°C - 55°C (-61) -40°C - 55°C (-66)	-20°C - 50°C (-90) -50°C - 60°C (-91)	-40°C - 55°C	-40°C ~ 60°C, with optional heater	-10°C ~ 40°C
Power Input	PoE, DC, AC	PoE, DC, AC (-61) PoH/PoE, DC, AC (-66)	PoE (-90) PoE, AC (-91)	PoE, AC	AC	PoE
Dimensions (mm)	147 x 375 x 322	Ø 172 x 157 (-61) Ø 237 x 365 (-66)	165 x 112 x 97 (-90) Ø 130 x 123 x 275 (-91)	Ø 210 x 110.4	503 x 170 x 400	160 x 70 x 38



Model Name	Cabinet Series	Industrial PoE Series	ND / NR Series	Low lux (-65) 4K Series (-91)
Description	• Outdoor-ready • High Durability • Tampering Alert • Accessories Choice	• Full Range of PoE Switches • Managed and Unmanaged • Ethernet/SFP Connections • Unique Management Features	• Full Range of Network Recorders • 8CH to 64CH, PoE Ports • Rack-mount, Hot-swap • Integration with VAST 2 Platform	• Various Form Factors • Ultra Low Lux, 60 Fps (-65) • 4K Resolution, 120 Fps (-91) • Smart Motion Detection VCA • Trend Micro IoT Security

*For more detailed technical specification for all available models, please refer to the general product brochure or visit VIVOTEK website.