







# inView<sup>™</sup> Series Video Visibility Safety Solutions.

The inView series of video, recording and telematics incorporates state-of-the-art technology for emergency apparatus. Our unique, customizable packages deliver increased safety, provide protection from potential liabilities and offer advanced vehicle tracking capabilities. FRC offers unmatched video options, from single camera systems to 360° HD bird's-eye view, recording, and data download. Make sure your apparatus is equipped with inView's state-of-the-art safety technology.

### **Prevent vehicle damage**

- Improved driver visibility and awareness
- Low speed tight space maneuvering and reversing
- Improved calibration minimizes blindspots
- Simplifies safe positioning of vehicles such as boom trucks and aerial trucks

# Protect your assets with fewer accidents and increased liability protection

- Reduce preventable accidents through driver awareness
- Evidence collection
- 360 degree liability protection

# **Cost effective systems and installation**

- All in one cost effective solution for 360 degree HD recording
- Optimized installation and calibration process

inView helps to navigate tight roads, back up into narrow parking bays and maneuver into compact parking spaces.







# Customize your system for your apparatus

### inView 360 HD™

inView 360 HD is an intelligent camera monitor system designed to assist low-speed maneuvering by providing the driver with a complete surround view of the vehicle in real time.

The system increases visibility around the apparatus providing the operator with a 360° bird's-eye view. In addition, the split screen monitor also displays one of four individual camera views automatically, dependent on driving operation; front, right, left or reverse.



### inView Guardian™

Provides complete video and data recording capabilities while also offering vehicle tracking via GPS and event marking. Video is provided through four high definition cameras located on each side of the apparatus. Video downloads can be viewed via software by manually removing the storage devices or automatically through Wi-Fi capabilities and options.



### inView TrueSight™

Boost your visibility and eliminate blind spots with flexible video packages that can be configured to meet any need. Choose the number of cameras and monitors to meet your requirements. Available in wired and wireless to easily accommodate new and retrofit installations. Many mix and match options all at a competitive price.\*





<sup>\*</sup> Go to www.fireresearch.com and look under the specific product pages for downloadable preferred product specs.



### **Key Operator and System Features/Benefits:**

- 1080p video output: enabling you to capture/record high definition video
- Built-in DVR: securely records "all connected cameras" individually making it great for insurance purposes when used in legal proceedings.
- 4 SD slots for up to 256 GB SD card: Up to 1 TB of total storage
- **GPS tracking:** is included in the system
- Video surround view in a single image: Protect against vehicle damage and costly repairs by eliminating vehicle blind spots. Let the 360° view assist with parking, checking your blind spots or to help navigate narrow roads.
- Toggle between views: Push driver button to change camera views
- User selectable "on screen overlay":
   Setting the width, length, and position
   of the overlay is all programmable
   by the customer for their specific
   apparatus. Saves valuable time when
   deploying outriggers, water dumps,
   tool boards or filling water tank
   vehicles.
- Vehicle Overlays: 8 preloaded vehicle overlays or load you own images

The inView 360 HD™ provides the apparatus driver with split screen view. The bird's-eye view is always visible providing a 360° view around the vehicle. This unique view allows the operator to see pedestrians and obstacles in close proximity to the apparatus or vehicle. The second view on the display switches between a front/left/right/ rear view depending on the operational conditions. An in-cab toggle switch allows the operator to override the default camera view for complete control over the system.

### Supports 4, 5 or 6 Cameras

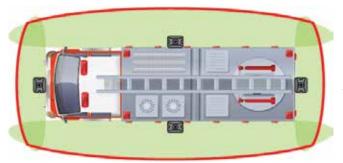
Standard system consists of a 2D, stitched 4 camera view. The system can accommodate an additional 1 to 2 cameras for larger vehicles such as articulated buses. All connected cameras are recorded.

# Ability to Overlay "Out-Rigger" Graphics

Help reduce risk of accidents and costly repairs with graphic "Outrigger" overlays for vehicles like fire trucks.

### **Automatic Monitor Shut-Off**

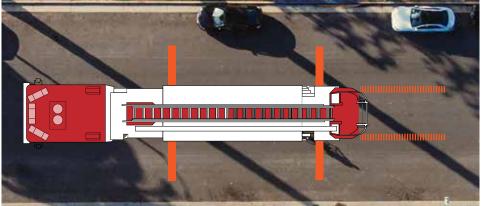
Based on predetermined vehicle speed, an optional monitor will automatically shut off the video display to help minimize operator distraction.



The four live images are combined, blended and stitched capturing all surrounding area including blind spots of the vehicle











An outrigger overlay provides operational safety by giving the driver visibility to the area required for deployment. This unique feature saves critical positioning time.



Four cameras placed around the apparatus capture a 195° ultra-wide angle view of each side of the apparatus.

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Electronic Control Unit (ECU)



**High Resolution Monitor** 

## inView 360 HD System Components

### **Wide Angle Cameras**

- · Four cameras deliver a clear, crisp high-definition image.
- Die cast aluminum housing
- Dimensions: 2.0" x 1.7" x 1.6" (52mm x 42mm x 40mm)
- Operating Temperature: -4° F to 160° F (-20° C to 70° C)
- Rating: IP67
- 195° ultra-wide angle

### **ECU - Electronic Control Unit**

- Blends all views and presents them to the driver in a real-time image.
- Dimensions: 5.8" x 6.8" x 1.5" (135mm x 172mm x 40mm)
- 2 video output
- 9V-36V
- Operating Temperature: -4° F to 160° F (-20° C to 70° C)
- Triggers driven from the 4 camera views
- Customizable vehicle template

### SNB100-C00 inView 360 HD Kit

**Includes**: (1) Front camera (1) Cable kit (1) Rear camera (1) Toggle switch (2) Side cameras (1) ECU (1) Control

### **OPTION - Video Monitor**

SNB1option-MH0 7" (178mm) HD Monitor

SNB1option-MH1 10.1" (257mm) HD Monitor

SNB1option-MS0 7" (178mm) STD Monitor

SNB1option-MW0 7" (178mm) STD Waterproof Monitor

### **Optional System Components**

SNB100-CIO Calibration Kit

### inView Guardian™

### **Capture Both Video and Telemetrics Data**

The inView Guardian captures both video and telematics data. Long range HD cameras are used to provide a large area of video coverage of what is happening around the vehicle. Cameras provide excellent zoom capability to capture clear license plate information. This helps ensure you capture events leading up to any incident. In addition, video, speed, location and date/time information are captured through GPS and internal clock. The G-Force sensor captures impacts and hard braking information and all the data is stored on an internal memory card which can be downloaded for PC viewing.

### **Guardian TH4C, TH6 or TH8 High-Definition DVR**

- Record up to 6 High-Definition Video Channels
- 30 FPS on all channels simultaneously (TH4C: D1-720 resolution) (TH6 & TH8: 1080 resolution)
- Wi-Fi & cellular communication packages available
- Plenty of Recording Space
- TH6/TH8 500GB of main storage (HDD) standard, and 32GB of backup storage on an SD card\* (2nd stream recording).
   \*Optional 1or 2 TB available
- TH4C up to 512GB on an SD card
- Supports Geo-fencing
- Delivers alerts when a vehicle deviates from a geographic boundary and the system will automatically locate any available video from that date and location
- GPS, G-Force Sensor and Event Marking
- Compact, Integrated Lock-box Design
- Quick and easy installation and enhanced security

### **High Definition Cameras**

A ground breaking development in mobile camera resolution, this next-generation camera uses progressive scan technology to deliver a clear, crisp high-definition image with up to 6x the resolution of a typical analog camera.

- HD1W/ HD3W/ 3MP (selectable) progressive scan resolution
- Range of wide or narrow lens sizes depending on application wide lens standard
- Local video out connector for quick set up of field of view and focus of camera
- Rugged, IP67 weatherproof, anti-glare and vandal resistant housing

### **OPTION - Interior Dome Camera**

- Compact, Infrared LED, tamper proof camera
- 2.8mm, 3.6mm & 6.0mm lens options
- 720p or 1080p
- Built-in audio

### **OPTION - Wedge Camera**

- Compact, Infrared LED, tamper proof camera
- 2.8mm, 3.6mm, 16.0mm or 25.0mm lens options
- 720p or 1080p
- IP67 weatherproof

Guardian Package includes:

STANDARD -

- HD DVR
- Up to 8 HD cameras
- OPTIONS -
- vMax View software
- vMax Commander
- software
- Interior Dome Camera







### inView Guardian HD system 4CH (up to 4 cameras)

SNB240-A00 Video, Guardian HD, TH4C, 512GB SD media card (1TB capable)

SNB261-A00 Video, Guardian HD, TH6, 500GB HDD STD (1 or 2TB capable)

SNB281-A00 Video, Guardian HD, TH8, 500GB HDD STD (1 or 2TB capable)

### inView Guardian HD 720P Camera Options:

SNB2option-CD10 Video, Camera 1 Dome 720p Lens 2.8mm 99 Deg. w/Audio

SNB2option-CD11 Video, Camera 1 Dome 720p Lens 3.6mm 77 Deg. w/Audio

SNB2option-CD12 Video, Camera 1 Dome 720p Lens 6.0mm 47 Deg. w/Audio

SNB2option-CW10 Video, Camera 1 Wedge 720p Lens 2.8mm 99 Deg. w/IR

SNB2option-CW11 Video, Camera 1 Wedge 720p Lens 3.6mm 77 Deg. w/IR

SNB2option-CW12 Video, Camera 1 Wedge 720p Lens 6.0mm 47 Deg. w/IR

SNB2option-CW13 Video, Camera 1 Wedge 720p Lens 16.0mm 17 Deg. w/IR

SNB2option-CW14 Video, Camera 1 Wedge 720p Lens 25.0mm 11 Deg. w/IR

### inView Guardian HD 1080P Camera Options:

SNB26option-CD30 Video, Camera 1 Dome 1080p Lens 2.8mm 107 Deg. w/Audio

SNB26option-CD31 Video, Camera 1 Dome 1080p Lens 3.6mm 84 Deg. w/Audio

SNB26option-CD32 Video, Camera 1 Dome 1080p Lens 6.0mm 51 Deg. w/Audio

SNB26option-CW30 Video, Camera 1 Wedge 1080p Lens 2.8mm 107 Deg. w/Audio

SNB26option-CW31 Video, Camera 1 Wedge 1080p Lens 3.6mm 84 Deg. w/IR

SNB26option-CW32 Video, Camera 1 Wedge 1080p Lens 6.0mm 51 Deg. w/IR

SNB26option-CW33 Video, Camera 1 Wedge 1080p Lens 16.0mm 18 Deg. w/IR

SNB26option-CW34 Video, Camera 1 Wedge 1080p Lens 25.0mm 12 Deg. w/IR

### inView Guardian HD Accessories (included with system):

XE-SNBGPS4-A0A Video, Guardian HD, GPS receiver, Mag Mount, 20ft (6m) Harness.

XE-SNBGSENSOREXT Video, Guardian HD, G-Sensor, 5ft (15m) Cable.

XE-SNBHKWTL10A-COA Video, Guardian HD, Power Harness 20ft (6m), 10A & 1A fuse.

XE-SNBWT1D20S20-A0 Video, Guardian HD, Diag. Button 20ft (6m) Cable, Signal 20ft

### **Guardian Software**

### vMax view hard drive software

This easy-to-use software simplifies the viewing, archiving and retrieval of video allowing for easy searching by video clip, alarm, date and time (even GPS location). Secure key details about incidents, or pinpoint the exact time and location of an apparatus. Plus, create archives for video evidence while maintaining privacy with our innovative blurring feature.

### See What Happened - and When

 Video synchronized with vehicle telemetry data, such as GPS location, vehicle speed, turn signals and G-force reports.

### Simple Video Navigation

Easy-to-use play, forward & rewind buttons, and timeline with zoom and scroll.

### Map-based Video Search

 Don't know the time of an incident? Simply select an area on the map where the incident occurred, and the system will automatically locate any available video from that time frame.

### vMax commander video and data fleet management software\*

vMax Commander efficiently manages your entire fleet's on-board video surveillance systems through a single web-based application. A convenient, user-friendly dashboard gives you a view of all of your video-related activities including alarms, video downloads, system health status, and connected vehicles. When combined with Smart-Reach, video with marked events can be automatically downloaded from an apparatus as it enters the station and is ready for viewing from a central location - eliminating the hassle and labor involved in retrieving video footage.

### Hassle-free Video Retrieval

 Eliminate hard drive handling costs and free up labor resources with automatic video downloading.

### Monitor Video System Health

 Monitor the status of your on-board video systems in a convenient at-a-glance dashboard of video health status, downloads and alarms.

### Web-based Video Management

 Now you can manage your video surveillance system from anywhere with no software to download or devices to configure.

### Quick & Easy Video Location

• Find critical video evidence in seconds with geographic and zone-based map search.

### Advanced Reporting

 Web-based access to user accounts and system health reports. Control access to critical video by restricting and assigning permissions.

### Advanced DVR Health Status

Monitor and report on camera system health right down to individual camera loss.

### View GPS Tracks

View GPS tracks on a map, with detail in 2 second intervals, without having to download video
 Ideal for route incident investigation. Operates via Wi-Fi, cellular or both.

<sup>\*</sup> Web based service. Yearly subscription license. Download to Wi-Fi or cellular



# **Remote Apps**

### Wi-Fi Smart Reach Wireless Access for Vmax Commander

Smart-Reach technology is an effective industrial-grade wireless solution for apparatus video surveillance. Smart-Reach Wi-Fi gives you the ability to download surveillance video automatically over a Wi-Fi network when the apparatus returns to the station house, making video surveillance retrieval virtually hassle-free. Access live video from anywhere, using a mobile device or web browser, so you can quickly and more effectively respond to emergency situations.

### Automatic Wi-Fi Video Downloading

 Working in combination with vMax Commander surveillance management software, Smart-Reach Wi-Fi provides a robust wireless infrastructure for automated video downloading.

### Secure, Industrial-grade Wi-Fi

• A truly robust wireless solution built for mobile applications.

### Reliable Video Downloading

Sufficient strength, signal and bandwidth for efficient and reliable downloading.

### Mobile Wireless Bridge (one per apparatus)

 This mobile wireless bridge allows you to connect to Guardian DVR and retrieve data over a wireless LAN with simplicity and security.

### Wireless Receiver Access Point (one per apparatus)

 This industrial-grade wireless access point delivers scalable and seamless wireless access when and where you need it.

### **Smart-Reach Cellular Access for vMax Commander**

Smart-Reach cellular access lets you access live video from anywhere, using a mobile device or web browser, so you can quickly and more effectively respond to emergency situations.

### Stream Live Video

 When connected to a Guardian DVR, the Smart-Reach router will securely transmit live video and tracking data over your network for easy viewing on your desktop, mobile device, or even integrated with apparatus routing software.

### Secure Connectivity

 IPSec industry standard protocol and data encryption protect sensitive data when transmitted over your network.

### Access Live Video From Anywhere

Tap in securely to live video from anywhere with an Internet connection.

### Smart-Reach Cellular Router

 This intelligent wireless router allows you to connect to the Guardian DVR and transmit video and tracking data securely over the cellular network.

### inView Guardian HD Viewing Options:

**SNBoption-1** Video, Guardian, Smart Reach Wireless Bridge, Wi-Fi.

SNBoption-2 Video, Guardian, Smart Reach Wireless Access Pt, Cell.

**SNBoption-3** Video, Guardian, V-Max view commander SW.

XE-SNBHDDSTB-A0A Video, Guardian, V-Max View Kit, Docking Sta., SW, Mouse.

### inView Guardian HD Addl. Media Cartridge Kits (Hard Drive):

XE-SNBTHH500G-K0A Video, Guardian HD, 500GB Hard Drive, Storage Case.

XE-SNBTHHK1T0-K0A Video, Guardian HD, 1T Hard Drive, Storage Case.

XE-SNBTHHK2T0-K0A Video, Guardian HD, 2T Hard Drive, Storage Case.

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# inView TrueSight Camera Systems offer Safety and Superior In-Cab Visibilty.

- Wired or Wireless Systems
- Heavy-Duty, Waterproof Cameras with Infrared LEDs for Nighttime Visibility
- Perfect for New or Retrofit Installations





Navigate tight roads.



Easily back up into narrow parking bays



Maneuver into compact parking spaces

### **Wireless System**

inView TrueSight wireless camera systems are available in 1 or 2 camera configurations. Wireless systems are a great option for upgrading video on an existing apparatus, or for use in aerial applications where running a video wire is not practical. A transmitter can connect to any one of our cameras allowing it to wirelessly connect to any monitor with RCA inputs. Simply plug the camera into the transmitter and the receiver into the monitor and the two will communicate wirelessly!

### **Full or Split Screen Wireless Monitor**

- 7" (178mm) TFT LCD Color with Super Sharp Display
- Accommodates one or two cameras in real time
- Full or Split-screen Mode
- Built-in Speakers & on-dash backlit buttons

### 130° Rear View Wireless Back Up Camera

- 2.1mm Sharp<sup>®</sup> Color CCD Camera
- High Quality Image with no Blind Spots
- 9 Infrared LED's for night time visibility up to 50' (15.24m)
- Anti-Vibration / Waterproof for severe conditions
- Wireless Transmitter

### 120° Side View Wireless Camera

- Sharp<sup>®</sup> Color CCD Camera
- 9 Infrared LED's for night time visibility up to 30' (9.14m)
- Mounts flush or using Mounting Bracket

### **OPTIONS**

- 7" (178mm) Rear View Mirror Monitor
- Large 10" (257mm) In-cab Monitor
- 7" (178mm) Waterproof Monitor on Panel
- Wireless Proximity Sensor with Display

# Main Camera Side/Rear Camera

### inView TrueSight Wireless Systems:

BCA210-A00 Video, TrueSight, Wireless, 1 Camera, No Monitor

BCA211-A00 Video, TrueSight, Wireless, 1 Camera, 7" (178mm) in-cab Monitor

BCA221-A00 Video, TrueSight, Wireless, 2 Camera, 7" (178mm) in-cab Monitor

### inView TrueSight Wireless Options:

BCA2option-C2 Video, TrueSight Wireless, 130° Front/Rear Camera

BCA2option-C6 Video, TrueSight Wireless, 120° Left (Driver) Side Camera

BCA2option-C5 Video, TrueSight Wireless, 120° Right (Passenger) Side Camera

BCA12option-PX1 Video, TrueSight, Wireless Sensor Proximity w/Display

BCA21option-PX1 Video, TrueSight, Wireless Sensor Proximity w/Display, One Camera

BCA22option-PX1 Video, TrueSight, Wireless Sensor Proximity w/Display, Two Camera

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inView TrueSight wired camera systems are available in your choice of 1, 2, 3, or 4 camera configurations and customizable to meet all of your vehicle video needs. Systems are available with or without monitor display depending on if you want to tie the video feed into an existing vehicle monitor display. Multiple camera systems include a video switcher allowing you to choose your camera view. The four camera system comes standard with Quad View monitor with four display windows.

### **Full or Quad Screen Wired Monitor**

- 7" (178mm) TFT LCD Color with Super Sharp Display
- Accommodates one to four cameras in real time
- Full or Quad-screen Monitor (with 4 cameras)
- Built-in Speakers & on-dash backlit buttons

### 130° Front / Rear View Wired Camera

- 2.1mm Sharp® Color CCD Camera
- High Quality Image with no Blind Spots
- 18 infrared illuminators for clear image up to 50' (15.24m) away
- Anti-Vibration / Waterproof for severe conditions

Kits with front and rear mounted cameras will come with two 130° Wired Cameras

### **120° Side View Wired Cameras**

- Sharp<sup>®</sup> Color CCD Camera
- 9 infrared illuminators for clear image day or night
- Mounts flush or using Mounting Bracket

### **OPTIONS**

- 7" (178mm) Rear View Mirror Monitor
- Large 10" (257mm) In-cab Monitor
- 7" (178mm) Waterproof Monitor on Panel
- Proximity Sensor with Display
- TH4C 4-Channel DVR
- Dome Waterproof Camera
- Brake Light Camera





### **Wired Customized Kits:**

- Up to 4 Cameras
- Up to 2 Monitor
   Systems plus options



### inView TrueSight WIRED SYSTEMS:

BCA110-A00 Video, TrueSight, Wired, 1 Camera, No Monitor, RCA Cable

BCA111-A00 Video, TrueSight, Wired, 1 Camera, 7" (178mm) in-cab Monitor

BCA120-A00 Video, TrueSight, Wired, 2 Cameras, No Monitor, Video Switcher

BCA121-A00 Video, TrueSight, Wired, 2 Cameras, 7" (178mm) in-cab Monitor

BCA122-A00 Video, TrueSight, Wired, 2 Cameras, (2) 7" (178mm) in-cab Monitors

BCA130-A00 Video, TrueSight, Wired, 3 Cameras, No Monitor, 1 Multiplexer

BCA131-A00 Video, TrueSight, Wired, 3 Cameras, 7" (178mm) in-cab Monitor

BCA132-A00 Video, TrueSight, Wired, 3 Cameras, (2) 7" (178mm) in-cab Monitors

BCA141-A00 Video, TrueSight, Wired, 4 Cameras, 7" (178mm) Quad View Monitor

### inView TrueSight WIRED SYSTEMS OPTIONS:

BCA1option-DV1 Video, TrueSight, DVR 4-channel

BCA1option-DV2 Video, TrueSight, DVR 4-channel w/no extra cables

BCA1option-GPS Video, TrueSight, GPS Sensor (DVR req.)

BCA1option-MN1 Video, TrueSight, in-cab Monitor 7" (178mm)

BCA1option-MN2 Video, TrueSight, in-cab Monitor Rear View Mirror 7" (178mm)

BCA1option-MN4 Video, TrueSight, in-cab Monitor 10" (257mm)

BCA1option-MW1 Video, TrueSight, Waterproof Monitor 7" (178mm)

BCA1option-MN8 Video, TrueSight, in-cab Monitor 24V 7" (178mm)

BCA1option-MN9 Video, TrueSight, in-cab Monitor 24V 9" (229mm)

BCA1option-PO Video, TrueSight, Panic Diagnostic Button (DVR req.)

BCA1option-PX0 Video, TrueSight, Wired Sensor Proximity w/Mon. Input

BCA1option-PX2 Video, TrueSight, Wired Sensor Proximity w/Display



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