

# AutoVu SharpZ3

## Mobile Automatic License Plate Recognition System

### High performance and edge-based mobile ALPR

The AutoVu™ SharpZ3 is a mobile automatic license plate recognition (ALPR) system that goes beyond traditional plate identification. It brings new levels of insight in vehicle analytics, situational awareness, and accuracy.

That's because the SharpZ3 is powered by the latest edge-based processing technology. Designed to combine high-performance and low power consumption, it lets you take full advantage of machine learning capabilities directly at the edge. And with its third optical sensor, the SharpZ3 can precisely position objects and vehicles to understand what's around the license plate, placing reads into context.

Expand your vision with the AutoVu SharpZ3.

### Features

Powered by AutoVu MLC machine learning based engine

Built-in vehicle type, color and plate origin recognition analytics

Ultra-low reading latency

3 optical sensors

Modular architecture designed to evolve seamlessly

Optional advanced GPS positioning with dead reckoning

Up to 4 high-definition ALPR cameras on the same base unit

Unified with Genetec Security Center



## Get more from your mobile ALPR system

### Go beyond conventional mobile ALPR

With the latest neural networking technology built in, the SharpZ3 redefines what mobile ALPR can do. Not only does it deliver higher accuracy and reduce misreads, the SharpZ3 unlocks new insights through its expanded suite of vehicle analytics.

### Capture the full picture

With its third optical sensor, the SharpZ3 effortlessly navigates complex urban environments. From flat and non-reflective plates to embossed designs and digital plates, the SharpZ3 can detect more plate designs than traditional units.

### Evolve your system with ease

The SharpZ3 is designed with growth in mind. The modular chassis of the SharpZ3 will protect your investment and let you tap into new modules and capabilities over time. This reduces the complication and cost of hardware replacement.

## AutoVu SharpZ3 Camera Specifications

### ALPR camera sensors

1456(H) x 1088(V) progressive scan @30fps, monochrome, global shutter

### ALPR capture range

Up to 63-foot (19-meter) range with retro-reflective license plates

### ALPR camera lens options

8mm, 12mm, 16mm, 25mm

### Context camera sensor

1456(H) x 1088(V) progressive scan @30fps, color, B&W night mode with 940nm illuminator, global shutter. JPEG still images and MJPEG video streaming

### Context camera lens

Based on ALPR lens configuration: (4mm, 6mm, 8mm, 12mm)

### Illuminators

Pulsed LED illuminator (740nm, 850nm, 940nm, 590nm)

### Water-resistance | sealing

IEC 60529 IPx6, IPx7 | IEC 60529 IP6x

### Dimensions

1.65 (h) x 5.12 (w) x 3.56 (d) inches (4.2 x 13 x 9 cm) | Excludes cabling and mounting bracket

### Weight

1.2 lbs (0.54kg)

### Color

Available in black/white

## AutoVu SharpZ3 Base Unit Specifications

### I/O

Base unit:

2x 10/100/1000 Base-T Ethernet ports (RJ45)

4x digital inputs (triggers), 0~32Vdc, opto-coupled

4x dry-contact outputs (relays): 2x 0.25A solid state relays, 2x 8A electromechanical relays

1x regulated 12V AUX output power, 200mA

### Mounting options

Horizontal and vertical

### Dimensions

3.6 (h) x 8.6 (w) x 9.3 (d) inches (9.1 x 21.8 x 23.6 cm).

Excludes cabling, cable racks and mounting brackets

### Weight

Base unit: 4.4 lbs (2.0 kg)

ALPR module: 2-ports: 4.1 lbs (1.9 kg)

ALPR module: 4-ports: 4.4 lbs (2.0 kg)

### Processors

Intel Atom Processor E3950

Additional dedicated machine-learning co-processor

### Power

12/24Vdc nominal (9 to 32 Vdc)

Optional modules:

2x ALPR unit base module

Typical Power consumption: 50W (with cameras)

4x ALPR unit base module

Typical Power consumption: 98W (with cameras)

## AutoVu SharpZ3 System Certification (Camera + Base unit)

### Vibration

IEC 60068-2-64

### Shock resistance

IEC 60068-2-27

### Electromagnetic immunity & emissions

FCC part 15 Sub-part B | ICES-003 Issue 4 | CISPR32 / EN55032 | CISPR24 / EN55024 | CISPR25 / EN55025 | EN 50498

### CE marking

EMC Directive 2014/30/EU; Automotive EMC Directive 2004/104/EC; RoHS Directive 2011/65/EU (including EU Directive 2015/863)

### Temperature

-40°F to 131°F (-40°C to 55°C) operating; -40°F to 185°F (-40°C to 85°C) storage

-40°F to 149°F (-40°C to 65°C) base unit operating, w/optional cooling pack

Certifications: IEC 60068-2-1 Category Ad and Ae | IEC 60068-2-2 Category Be | IEC 60068-2-14 Category Na

Includes hi-temp auto-shutoff protection

## Optional modules

### PoE module

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**Function**

Connect up to 4 PoE devices

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**Ports**

4x 10/100/1000 Base-T ethernet ports with ix Industrial(tm) connectors

PoE+ capable - 802.3at Type 2 (30.0W)

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**Power**

60W total power budget for powered devices

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### Navigation module

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**Function**

Integrated inertial sensors with automotive dead reckoning

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**Connectivity**

Multi-constellation single-band (L1) GNSS receiver (GPS/Galileo/GLONASS)

VSS and odometry sensor inputs for wheel ticks

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### Auxiliary camera

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**Function**

Auxiliary wheel imaging camera unit

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**Sensor:**

2MP sensor with f4.0 mm lens

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**Power**

PoE 802.3af Type 1 (5.8W)

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**Illuminators:**

Built-in IR illumination

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