Verkada

Understanding Verkada's AI Advantage

Verkada has built AI into our cameras since day one. Here's what makes us different.

01
End-to-end control

Industrial design & component selection

Verkada owns the entire design process, from external look and feel to internal architecture. Our hardware team carefully selects and tests every critical component – like chipsets, imagers, and lenses – to ensure devices are built to our exact specifications.

Custom firmware

We develop and maintain the firmware that runs on every Verkada camera and enables the device to function. Because of this, we can rapidly deploy updates, integrate new AI models, and adjust detection thresholds, ensuring alignment between hardware and software.

The result

By controlling every aspect of the development process, we can purpose-build cameras to leverage AI. We intentionally make design choices with advanced analytics in mind, and we can continuously tune image quality and correct colors to deliver consistent results in real-world environments.

02
In-house expertise

Go beyond off-the-shelf AI

Some security providers process video streams using generic, cloud-based AI models. While this approach is easy to implement and scale, we've observed that these models often lead to inconsistent and inaccurate results.

The human element

Our world-class team of AI engineers build, train, and fine-tune models designed specifically for Verkada cameras. While we often leverage open-source foundation models as a starting point, a majority of the AI-powered camera features we offer are customized in-house for optimal performance.

The result

By running custom AI models on-device, tuning image quality, and routing outputs through additional models in the cloud for filtering and refinement, we can achieve much higher levels of accuracy. This approach allows us to confidently deploy ambitious features tailored for specific use cases.

03
Built-in future-proofing

High-performance chipsets

Advanced features like AI-powered activity detection rely on AI models with hundreds of thousands of parameters – complexity that requires tremendous processing power. We equip our cameras with high-performance AI chipsets that deliver processing power to support advanced features, leaving ample space for future advancements and innovation.

Relentless velocity

As AI evolves at breakneck speed, our features do, too. Our AI engineers work tirelessly to incorporate the latest advancements and push the boundaries of what's possible, delivering brand-new capabilities and continuous enhancements at each of our quarterly launches.

The result

A Verkada investment is protected for years to come. Our forward-looking hardware is one of the many reasons we offer a 10-year warranty on most cameras while continuously pushing the boundaries of what's possible with AI.

Try Verkada free
30-day trial includes a camera and full access to the Command platform. www.verkada.com/try