



# BriefCam Grow



Seamlessly and confidently implement and scale BriefCam Video Analytics with pre-configured software and hardware offerings



## What Is BriefCam Grow?

Today, businesses require agile computing solutions that can scale with their evolving needs. The flexible and adaptable **BriefCam Grow** hardware offering is designed to support business' expansion and achievement in a dynamic technological landscape. Revolutionize your organization's approach to computational requirements, leveraging intelligent video analytics and efficient video processing to drive crucial operational and security decisions and outcomes.

BriefCam Grow flexibly facilitates multiple configurations, deployable on either 1U or 2U rack servers, housing one or four GPUs, respectively. As outlined in this overview, BriefCam Grow empowers businesses to seamlessly run diverse Video Analytics Platform and take advantage of simple upgrade paths to larger configurations as their organization evolves – all while repurposing existing hardware investments.

## Hardware Optimized for BriefCam Software

A complete, affordable solution, BriefCam Grow is optimized for BriefCam Insights software, providing a single, robust device for the comprehensive BriefCam Video Analytics Platform for video search, alerting, and data visualization, including the REVIEW, RESPOND, and RESEARCH modules.

## BriefCam Video Analytics Functionality

### [REVIEW](#) | Accelerate Investigations

BriefCam's search capabilities filter objects and events of interest by men, women, children, vehicles, and lighting changes with speed and precision, using an ever-expanding set of object classes and attributes, in addition to face recognition, license plate recognition, appearance similarity, color, size, speed, path, direction, and dwell time, providing an ever-increasing and powerful set of distinct search combinations.

### [RESPOND](#) | Attain Situational Awareness

BriefCam's real-time alerting capabilities enable organizations to proactively respond to situational changes in their environment, while effectively balancing sensitivity, accuracy, and efficiency. BriefCam's alerts can be integrated with a VMS or PSIM alerting module as well as almost any messaging system.

### [RESEARCH](#) | Derive Operational Intelligence

BriefCam's embedded operational intelligence platform enables users to quantitatively analyze their video and derive actionable insights for data-driven safety, security, and operational decision-making by aggregating and visualizing extracted video metadata.



## BriefCam Engines

BriefCam offers two different engines:

### Window-based Engine

The Windows engine is the BriefCam legacy engine. It is versatile and excels in producing accurate video analytics in many outdoor and indoor environment across various types of cameras. This engine supports both on-demand and real-time processing.

### Linux-based Engine

The Linux engine is BriefCam's new cutting-edge video analytics engine. The Linux engine currently specializes in real-time processing. The Linux-based engine aligns with AI-industry standards, significantly boosting throughput for real-time channels when compared to Windows. Implementations looking to harness Linux for real-time processing will require a concurrent Windows machine to handle user management, on-demand processing, and RESEARCH functionalities.

## BriefCam Video Processing Types

### On-demand Processing

On-demand processing allows users to forensically review, selectively analyze, or manipulate video content based on specific criteria, events, or queries. On-demand processing offers flexibility and efficiency in extracting pertinent information from footage.

### Real-time Processing

Real-time video processing involves the instantaneous analysis of video data as it's being captured, with no noticeable delay. This capability enables immediate alerting, allowing for instant responses to events. Linux is widely regarded as the superior OS for real-time processing due to its resource efficiency, kernel control, low latency, stability, and real-time extensions.



## Flexible Design: Choose What's Right for Your Organization

### Window-based Engine vs. Linux-based Engine

BriefCam Grow can support either BriefCam Windows-based or Linux-based engines. Selecting the appropriate video analytics engine will depend on the specific needs and priorities of your organization. The Linux-based engine is recommended for mission-critical applications requiring real-time analysis and immediate alerting and includes new analytics capabilities such as [Custom ClassifID](#), enabling users to define their own custom classes for vehicles and people. The Windows-based engine is the optimal choice for applications with less stringent time constraints and when organizations need to leverage existing Windows-based resources.

Understanding the strengths of each engine empowers each organization to optimize its video analytics performance and flexibly achieve desired outcomes. Your dedicated BriefCam account team is available to consult regarding the best engine to fit your needs.

### On-Demand and Real-Time Processing

BriefCam Grow supports both on-demand and real-time processing. On-demand processing empowers organizations with controlled analysis and in-depth investigations, making it ideal for reviewing video footage. Real-time processing delivers immediate alerts and enhances proactive responsiveness, making it indispensable for security and safety-critical applications. Having both on-demand and real-time processing enables organizations to rapidly review cases and proactively respond to unfolding situations, while also helping accelerate investigations and reduce time-to-target.

### Upgrade Plan

BriefCam Grow supports deployments of up to 120 channels and utilizes the same hardware as a full BriefCam system, enabling seamless upgrades and scalability as your channel analysis needs expand.

### Retention Periods

Original fetched videos are saved in BriefCam Grow for 7 days. Video processing assets (like close-up clips and VIDEO SYNOPSIS®) are retained for 14 days. RESEARCH detailed dashboards show per-object data for the last 30 days and RESEARCH aggregated dashboards present aggregated per-hour data for a full year.



## Hardware

### 1U Rackmount Workstation



Harness powerful processing in a 1U rackmount design, featuring a high-performance GPU, that delivers unmatched video processing capabilities in a space-efficient form factor.

**Optimized for Data Centers:** The 1U rackmount variant is tailor-made for data center deployments, efficiently utilizing rack space and catering to environments with limited spatial resources.

**Scalable Solution:** Designed to scale to meet evolving video analytics demands, the 1U rackmount processing machine supports seamless expansion for organizations as they grow.

### 2U Rackmount Server



The 2U rackmount processing machine combines four powerful GPUs, delivering unrivaled video processing performance to tackle the most demanding video analytics tasks.

**Blending Performance & Manageability:** The 2U rackmount design balances high-performance processing capabilities, while streamlining manageability for medium to large-scale video analytics implementations.

**Critical Redundancy & Reliability:** The 2U rackmount variant integrates redundancy and advanced error-checking mechanisms to ensure high availability and reliability for mission-critical video analytics applications.



## Windows-based BriefCam Engine

In the classic BriefCam engine configuration, a minimum of two servers are required. Additional processing and/or management servers can be seamlessly added, as needed, when processing channels increase.



**1U+ 1U Configuration**



**1U + 2U Configuration**

## Channels

Hardware	On-Demand	Real Time
1U + 1U	25-100 channels	25 channels
1U + 2U	25-100 channels	100 channels

### Notes:

- The number of on-demand and real-time channels depends on the software license.
- On-demand processing is limited to 25 hours of processing per hour (across channels).
- The number of channels assumes cameras with 1080p resolution with medium activity level (~1500 objects per camera/hour). It was tested with an average bitrate of 2.3 Mbps and a maximum of 30 FPS.
- The management server is a Windows-based 1U. The processing server is either a Windows-based 1U or a Windows-based 2U (depending on the required real-time throughput).
- The upgrade path involves additional processing and/or management servers according to the required performance.

**Disclaimer:** Actual throughput depends on activity levels and scene complexity.



## Linux-based BriefCam Engine

The next generation BriefCam engine drives improved performance for real-time streams, together with faster alerts, longer dwell time, customizable classes and more. In this configuration, a minimum of two servers are needed, where one is Windows-based (for management, on-demand processing, and RESEARCH) and one is Linux-based (for real-time stream processing). As additional channels are needed, it is easy to add either Linux-based or Windows-based servers.



1U+ 1U Configuration



1U + 2U Configuration

## Channels

Hardware	On-Demand	Real Time
1U + 1U	25-100 channels	30 channels
1U + 2U	25-100 channels	120 channels

### Notes:

- The number of on-demand and real-time channels depends on the software license.
- On-demand processing is limited to 25 hours of processing per hour (across channels).
- The number of channels is based on 1080p resolution cameras with medium activity level (~1500 objects per camera/hour). It was tested with an average bitrate of 2.3 Mbps and a maximum of 30 FPS. Actual throughput depends on activity levels and scene complexity.
- The Linux-based BriefCam engine currently processes only real-time streams.
- The management server is a Windows-based 1U. The processing server is either a Linux-based 1U or a Linux-based 2U (depending on the required real-time throughput).
- The upgrade path involves additional processing and/or management servers according to the required performance.

## ABOUT BRIEFCAM

BriefCam® is the leading provider of video analytics software that enables people, companies, and communities to unlock the value of video surveillance content. Delivering accurate, flexible, and comprehensive solutions, BriefCam's video analytics platform provides valuable insights for accelerating investigations, increasing situational awareness and enhancing operational intelligence.

VIDEO SYNOPSIS® technology is a registered trademark of BriefCam, Ltd.

For more information, visit <https://www.briefcam.com/>.

