



BriefCam Compact



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



What Is BriefCam Compact?

Today, businesses rely on intelligent video analytics and efficient video processing to drive crucial operational and security decisions. Demanding powerful and adaptable solutions, businesses of all sizes require top-tier video processing.

Designed for sites with less than 100 cameras, **BriefCam Compact** is a groundbreaking hardware offering that includes a selection of a Tower workstation or rackmount servers and boasts leading video processing capabilities within a compact and space-saving design.

BriefCam Compact is the ideal choice for on-site video analytics tasks. This document delves into the different BriefCam Compact configurations that introduce optimized video processing and enhanced efficiency for localized ventures.

Hardware Optimized for BriefCam Software

A complete, affordable solution, BriefCam Compact is designed to meet the needs of organizations of all sizes – from single locations to multi-site enterprises. BriefCam Compact 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 Compact 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 Compact can support processing on-demand, in real-time, or both, depending on hardware implementation. Selecting the relevant processing approach depends on your organization's video analytics goals. 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. By understanding the strengths and best-fit use cases of all approaches, organizations can maximize their video analytics strategy, optimize resource allocation, and derive actionable insights for better decision-making.

Upgrade Path

BriefCam Compact is intended for sites that have a set number of cameras, starting from 25 cameras. If more than 100 channels are required (now or in the future), consider exploring BriefCam Grow.

If multiple sites are part of the same deployment, explore the BriefCam Nexus multi-site offering for centralized alert and data management.

Retention Periods

Original fetched videos are saved in BriefCam Compact 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

Tower Workstation



The Tower is ideal for small sites and spaces and an excellent choice for on-site video analysis, designed for environments where rapid deployment is essential.

Powerful Processing. Compact Design: The Tower Workstation drives top-tier video processing in a space-saving design, enabling quick and easy deployment in areas with space constraints, negating the need for a rackmount infrastructure.

Unmatched Versatility & Mobility: With its compact design, the Tower processing machine offers unmatched versatility, enabling mobility and ease of relocation, while maintaining exceptional video processing performance.

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 one server is needed.



Mini Tower Workstation



1U Rackmount Workstation



2U Rackmount Server

Channels

Hardware	# of Boxes	On-Demand	Real-Time
Tower	2*	25 – 100 channels	20 channels
1U	2*	25 – 100 channels	25 channels
2U	1	25 – 100 channels	75 channels

* A single box can support either on-demand OR real-time 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.
- 1 GPU can handle either on-demand or real-time channels. Therefore, 2 boxes (for Tower and 1U options) or a 2U box, are required to support both on-demand and real-time channels.
- If 2 boxes are used (Tower or 1U), one will run the management, on-demand processing, and RESEARCH. The second box will run real-time processing.

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).



Mini Tower Workstation



1U Rackmount Workstation



2U Rackmount Server

Channels

Hardware	# of Boxes	On-Demand	Real Time
Tower	2	25 – 100 channels	25 channels
1U	2	25 – 100 channels	30 channels
2U	1	25 – 100 channels	90 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 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.
- If 2 boxes are used (Tower or 1U), one will be Windows-based – running management, on-demand processing, and RESEARCH – and one will be Linux-based, running real-time processing.
- If the 2U box is used, Windows and Linux will be installed as virtual machines.

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/>.

