



## K2 Summit 3G Production Client

TOP  
REASONS  
TO BUY



The Grass Valley K2 series—comprised of K2 Summit 3G/K2 Solo 3G media clients, K2 media servers, and K2 10G storage—address news, studio, outside broadcast, and playout environments. K2 is a versatile platform that includes advanced capabilities for live event and production applications. K2 provides the infrastructure for K2 Dyno Replay Systems, and GV STRATUS nonlinear production tools.

---

## 1. Architectural flexibility and performance headroom supports emerging high-performance media standards

- Inclusion of 3G HD industry formats, currently supporting 3G HD 1080p50/60 Level A using AVC-Intra Class 100 at 200 Mb/s
- By using 3G HD 1080p50/60 Level A using AVC-Intra Class 100 at 200 Mb/s, K2 Summit 3G systems can optionally be configured for recording and playing out material based on the emerging UHD/4K standards

With incrementally small software expenditures, systems can be cost-effectively expanded to support evolving industry media formats and production tasks, while minimizing impact on operations, maintenance, and support.

## 2. Capabilities that enhance live event and production environments

- Bidirectional channels with automatic up/down/crossconversion and aspect ratio conversion.
- Channels can be configured for various capabilities with a software option that enables multicam, super slow-motion, video/key, and 3D.
- Software option adds simultaneous generation of MPEG-4 proxy and low bit rate streams for monitoring.
- APIs that enable tools like GV STRATUS and K2 Dyno as well as third-party applications for production.
- Same system supports various applications such as ingest, editing, replay, playout, automation, and production.

Operational efficiencies are increased with productivity gains using automated processes and powerful software production tools with easy to use interfaces. Revenue increases are realized by the lower cost of creating new content and programming. Capital and operational costs are lowered by having the efficiency and extensibility of a single platform that covers diverse production tasks and provides for easier operation, maintenance, and support.

## 3. Flexible codec implementation supports multiple compression and file wrapper types

- Software switch to any supported format so systems are not limited to fixed configurations.
- All supported formats can be played back-to-back on a single output channel.
- MPEG-2, DV, AVC-Intra, DNxHD compression types.
- Automatic up/downconversion, 720p/1080i crossconversion, and aspect ratio conversion.
- Extended H.264 playback, including support for workflows with PitchBlue.
- QuickTime support for in-place editing with systems such as Apple and Adobe.
- MXF, GXF (SMPTE ST 360), and QuickTime file exchange.

Initial capital costs are low because extra system components are not needed. Over time, with incrementally small expenditures to add capabilities, cost of ownership remains low and revenue potential can increase.

## 4. Optimization of the latest IT technology to match broadcast performance requirements

- Solid-state memory with embedded OS for high reliability.
- High-performance optimized media storage based on Enterprise SAS drives.
- SAN systems with 8 Gb FC and iSCSI data bridging between media and storage.
- USB 3.0 and 10/1 Gigabit Ethernet connectivity.
- Dual core processors for proxy generation, low-resolution streaming, networking, and application hosting.

Capital costs are reduced by purchasing systems that take advantage of high volume IT components. Revenues are maintained by offering new capabilities based on systems that incorporate the latest technologies.

## 5. Tuned systems for the specific needs of media production and broadcast playout

- Scalable architecture for bandwidth, channel count, capacity, and file transfers to support the largest of installations.
- Simultaneous bandwidth management for both media and file operations.
- Fault tolerant and high availability for uninterrupted on-air performance.
- Purpose built, high reliability devices for media input/output.
- Specialized buffering, pre-fetching, read/write processes, and error correction for efficient handling of large video files.

Operational risks are reduced by utilizing optimized systems that incorporate a real-time, guaranteed performance implementation with redundancies so that incidents of no content or incorrect content are reduced. With incrementally small costs to add capabilities, capital expenditures are lowered through cost-effective system expansion to increase count, capacity, and services with a scalable architecture.

## 6. Operation as part of a large SAN or as individual standalone units offering total flexibility in infrastructure design

- Standalone systems with more than 75 hours of HD storage.
- Standalone system with external RAID storage for hundreds of hours of storage.
- Share content and resources between standalone devices for applications such as K2 Dyno Replay Systems.
- Shared storage SAN implementations supporting over 150 channels.
- Guaranteed amounts of file transfer bandwidth on standalone and shared storage systems.

Capital costs are reduced by being able to tailor system implementations to specific workflows and requirements. Operational costs and risks are reduced by having a unified system architecture to maintain, support, and operate.

## 7. Built-in monitoring capabilities for enhanced operation

- Multiviewer displays channels on a standard VGA output.
- A secondary SDI output provides monitoring capabilities.
- When running AppCenter locally, active video is displayed in the user interface.
- AppCenter provides local or remote channel and status monitoring.
- Selectable on-screen display of channel/clip data on the multiviewer and for SDI super out (with AppCenter Pro/Elite).

Capital and operational costs are reduced by having a smaller number of system components and easy integration into a variety of environments. Enhanced monitoring increases the chance of resolving issues before they can cause problems, while reducing the likelihood of wrong or missing content.



[WWW.GRASSVALLEY.COM](http://WWW.GRASSVALLEY.COM)

Join the Conversation at [GrassValleyLive](#) on Facebook, Twitter, YouTube and [Grass Valley - A Belden Brand](#) on LinkedIn.



[www.grassvalley.com/blog](http://www.grassvalley.com/blog)

This product may be protected by one or more patents. For further information, please visit: [www.grassvalley.com/patents](http://www.grassvalley.com/patents).

Belden®, Belden Sending All The Right Signals®, the Belden logo, Grass Valley® and the Grass Valley logo are trademarks or registered trademarks of Belden Inc. or its affiliated companies in the United States and other jurisdictions. Grass Valley products listed above are trademarks or registered trademarks of Belden Inc., GVBB Holdings S.A.R.L. or Grass Valley Canada. Belden Inc., GVBB Holdings S.A.R.L., Grass Valley Canada and other parties may also have trademark rights in other terms used herein.

Copyright © 2014, 2019 Grass Valley Canada. All rights reserved. Specifications subject to change without notice.