



Kamai® 500 Series Hybrid Media Player

IP | OTT | Live Broadcast



Key Features

- Optimized for digital video broadcast and streaming media services (OTT)
- Easily integrates with existing in-home networks and broadband services
- Optional ATSC, QAM, or ISDB-T tuner for broadcast reception
- Whole-home wireless HD video distribution with Wi-Fi options
- Energy efficient with DeepSleep™ technology for reducing power consumption up to 99% in standby mode

Consumers are expecting more from their service providers. As users gain more access to a variety of content, the demand for a more seamless digital lifestyle continues to rise.

High Performance in a Sleek Compact Design

Stay ahead of the game with the compact, cost-optimized Kamai 500 series.

You no longer have to sacrifice performance for cost. With twice the processing speed and half the power consumption of previous generation settops, the Kamai 500 series exceeds both in performance and energy efficiency.

Continuous Video Delivery with Adaptive Bit-Rate Streaming

The Kamai 500 series is ideal if you want to offer video but have a geographically diverse broadband footprint with a range of network infrastructure capabilities. By leveraging the advantages of Adaptive Bit-Rate (ABR) streaming technology, Kamai 500 can reliably deliver HD video

across the Internet and over last mile networks of varying quality and bandwidth. ABR streaming encodes content at various bitrates and resolutions, and then dynamically selects the best quality stream that can be delivered over the current network conditions.

If the network conditions change, like when multiple applications are sharing a network connection, the Kamai 500 will automatically adapt to ensure uninterrupted video delivery. Now, you can deliver video to all of your broadband subscribers, not just customers with fiber (FTTH) or other high-speed connections.

Digital Tuner Options for Hybrid Deployments

Kamai 500 series offers optional off-air and digital cable tuner options to help reduce retransmission fees and network bandwidth demand. Kamai 500 supports worldwide terrestrial broadcast standards (ATSC, DVB-T, DAB, T-DMB, ISDB-T, CMMB, CTTB) and is also compatible with worldwide cable broadcast standards (DVB-C, ITU-T J.83 Annex A, B, C).

Whole-Home Wireless HD Video Distribution

The Kamai 500 series offers flexible networking options to enable wireless HD video distribution throughout the home. Reduce installation time, cost and com-

plexity of wiring a home with Kamai's pre-802.11ac (5 GHz) and 802.11n (2.4 GHz) Wi-Fi networking options.

Based on the latest standard for advanced wireless communications, the pre-802.11ac Wi-Fi option supports dual-band technology and uses multiple antennas (MIMO) and beam forming technologies to provide better coverage, superior performance and high quality of service (QoS) for distributing video within the home. When matched with an accompanying access point, Kamai enables whole-home Wi-Fi transmission speeds over 600 Mb/s.

Hassle-free installation and easy distribution of HD video throughout the home without wires. The Kamai 500 series provides a true video-grade Wi-Fi client solution and cost-effective architecture to accelerate the adoption of IP-based video services.

Cloud-based Applications for a Connected Home Experience

Meet subscriber's demand by offering the most advanced online services and applications. Based on Broadcom's latest chipset, the Kamai 500 series supports streaming video services like VUDU, YouTube and Amazon On Demand. With Kamai 500, subscribers can access popular social media applications such as Facebook, Flingo, and Twitter, share photos via Flickr and Picasa, and enjoy online music from Pandora, MOG and Grooveshark.*



Kamai 500 with external 5 GHz Wi-Fi option

Ready-to-Deploy Hybrid TV Solution

By supporting third-party middleware and digital rights management (DRM) solutions such as Conklin Intracom, Latens, Microsoft PlayReady, Minerva, Nordija, SecureMedia, and Verimatrix, the Kamai 500 enables you to quickly deploy a video service that also offers advanced cloud-based features for Hybrid TV and over-the-top (OTT) streaming applications. Kamai also offers advanced applications such as an HTML5-compliant browser and C/C++ SDK to enable an open and flexible platform for application development.

Supports Legacy Televisions

Broaden your addressable homes by supporting the millions of televisions in subscriber homes that do not support HDMI. Kamai 500 supports composite and component video, as well as analog stereo audio and digital multi-channel audio outputs.

*Online services and applications may vary and are subject to middleware and third-party support.

Technical Specifications

Video Formats	• VC-1 Advanced Profile @ Level 3 • AVC/H.264 High Profile @ Level 4.1 • MPEG-2 Main Profile @ High Level • MPEG-4 Part 2 Advanced Simple Profile • DivX versions 3.11, 4.1, 5.X, and 6.X • XVID • MPEG-1/H.261/H.263 • AVS decode with support for AVS1-P2 Jizhun Profile @ Level 6.0 • MPEG still picture decode • MVC
Audio Formats	• AAC LC, AAC LC+SBR Level 2, AAC HE Level 2, AAC HE Level 4 • Dolby Digital, Dolby Digital Plus • MPEG I Layer 1, 2 • MPEG I Layer 3 (MP3) encode/decode • Windows® Media Audio (WMA) • WMA pro • AAC HE 5.1 decode plus DTS 5.1 encode SPDIF output • AAC HE 5.1 decode plus AC3 5.1 encode SPDIF output
Video Outputs	• NTSC-M, NTSC-J, PAL-BDGHIN, PAL-M, PAL-Nc, SECAM analog outputs • 480i/480p/576i/576p/720p/1080i/1080p output formats • Component RGB or YPrPb output • DCS support • Rovi 7.1 support • HDMI 1.4a with 3D format support
Security	• AES, 1DES, 3DES, CPRM, CPPM, CSS, and DTCP copy protection algorithms and standards • VB, ARIB, and DC2-compliant transport demux with 1DES, 3DES, DVB, Multi2, and AES descramblers
Wireless Networking Options	• Internal 802.11n (2.4 GHz) Wi-Fi • External pre-802.11ac (5.4 GHz) Wi-Fi – Real-time Transmit Digital Beam Forming (MIMO) – Baseband 3Tx3R, up to 3 spatial streams – Client-to-client direct connection (TDLS) – Digital beam forming for up to 4.5db gain – Standards: pre-802.11ac, 802.11a, 802.11h, 802.11n, 802.11e, 802.11i – Wi-Fi Compliant: WMM, WMM-PS, WPA, WPA2, WPS – Encryption: AES, TKIP, WEP64/128 – RF: 2.4GHz, 4.9GHz – 5.85GHz – Modulations: BPSK, QPSK, 16-QAM, 64-QAM – FEC: 1/2, 2/3, 3/4, 5/6 – Max PHY Rate: 450 Mb/s
Hybrid Tuner Options	• ATSC • QAM • ISDB-T
Energy Management	• Power 7W maximum at 90-264VAC, 48-63Hz • ENERGY STAR compliant
Type Approvals	• FCC Part 15, CEA-60065



Front and back panels of Kamai 500

Technical Specifications (continued)

Front & Side Panels	• Illuminated standby indicator (on/standby) • IR receiver • USB 2.0 Host Type A • SD memory card • Reset to factory
Back Panel Connectors	• Optical digital audio • Mini DIN connector for composite/component video & stereo audio fan-out cable (included) • HDMI 1.4a • RJ-45 10/100 Base-T Ethernet with integrated status LEDs • DC power
CPU & Memory	• Broadcom BCM7229 • MIPS4380 dual thread core 495MHz • 512MB DDR3-1600 • 4MB NOR flash (secure boot ROM) • 256MB NAND flash
Mechanical	• 4w x 4d x 1h inches • 5-35°C (40-95°F) operating temperature • 30-95% relative humidity

Part Number

99-880000-02
99-880000-02U
99-880400-02
99-880020-02U
99-880490-02U
99-880410-02U
99-930470-02
99-930480-02

Description

Kamai 500 Hybrid Media Player with Stylus remote
Kamai 500 Hybrid Media Player with URC remote
Kamai 501 Hybrid Media Player with internal 2.4 GHz Wi-Fi & Stylus remote
Kamai 502t Hybrid Media Player with DVB-T tuner & URC remote
Kamai 503c Hybrid Media Player with QAM tuner, internal 2.4 GHz Wi-Fi & URC remote
Kamai 503t Hybrid Media Player with ATSC tuner, internal 2.4 GHz Wi-Fi & URC remote
Kamai 523c Hybrid Media Player with DVB-C tuner, internal 2.4 GHz Wi-Fi & Stylus remote
Kamai 523t Hybrid Media Player with ISDB-T tuner, internal 2.4 GHz Wi-Fi & Stylus remote

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External dual-band 2.4 GHz/5 GHz Wi-Fi USB adapter for Kamai 500 series