The NEXIO Volt™ compact transmission server addresses the need for a small form-factor, high-performance baseband video server. Available in two versions – integrated storage or shared storage – NEXIO Volt servers offer support for up to four mixed SD/HD baseband channels in a 1RU package.

From ingest to transmission, the NEXIO Volt server delivers the exceptional reliability, flexibility and format transparency that today’s broadcast operations demand.

Key Benefits:
- Reduced TCO — Increase channel density, use less power and generate less heat with up to four channels per rack unit
- Flexible configurations and capacities — Choose the right mix of HD and/or SD channels and software to fit today’s requirements, with easy upgrades to meet future requirements
- On-air reliability — Protect media assets with redundant and hot-swap components, as well as patented RAID storage protection for uninterrupted video access

FEATURES
- Up to 4 SD/HD channels in a 1RU platform
- A variety of software-licensed configurations from 2 to 4 SD/HD channels
- Ingest and playback of SD (625i/625i) and HD (1080i, 720p) content on the same chassis
- [Optional] baseband ingest and playout support for Avid DNxHD® native editing codec
- [Optional] file ingest and baseband playout support for the popular H.264 codec
- Shared storage version with direct access to NEXIO® true shared storage, which can scale to hundreds of channels
- Patented Intrinsic Mirroring™ support for complete shared storage redundancy
- Integrated storage version with RAID-protected storage of video and audio essence
- Fault tolerance through dual hot-swappable power supplies and RAIDsoft™ software RAID management system
- NEXIO FTP Server for file-based ingest and export
- Content transfer of MXF, QuickTime®, AVI, GXF, Pinnacle, MPEG and native LXF format files
- NEXIO Playlist™ event sequencing for playing content to air (optional for shared storage version)
- NEXIO Remote™ for manual ingest, playout and media management control
- Agile, integrated software codecs, supporting a wide range of formats including DV, MPEG-2, IMX, Avid DNxHD®, Sony® XDCAM® HD, H.264, DVCPRO HD, and Panasonic® AVC-Intra™
- Software-based up/down/cross conversion
- Aspect ratio conversion
- SMPTE 2016 and ATSC TSG-814 AFD support
- Discontinuous timecode support
- Dolby® Digital and Dolby® E pass-through
- Support for a wide range of automation, archiving and media management applications
- Redundant Ethernet switch support
- Support for NEXIO AMP Track Router, which provides control of audio track tagging, addition, deletion, shuffling, and playback routing; also enables import, export and management of closed caption files
NEXIO Volt™
Compact 1RU Integrated and Shared Storage Transmission Servers

PRODUCT DETAILS

Built from the same technology as the award-winning NEXIO AMP® advanced media platform, the NEXIO Volt server is available with built-in RAID-protected media storage for video and audio essence. This makes NEXIO Volt ideal for applications including "lights out" operations, disaster recovery, delay, edge server, on-air cache, production playout and ingest to archive.

Alternatively, NEXIO Volt is available for use with NEXIO true shared storage, a modular and scalable system that makes it easy to add channels and storage as a broadcaster’s requirements change. Multiple NEXIO Volt servers can be attached to a NEXIO shared storage system, enabling systems with hundreds of channels and integration with other NEXIO baseband servers, editors and gateways.

Environmental considerations are an essential part of the NEXIO Volt design. New high-performance, low-power processors reduce power consumption and heat generation. A strong industrial design concept enhances structural integrity and reduces weight, while also reducing materials and coatings used in manufacturing.

The NEXIO Volt server is ready to use in a variety of broadcast applications. This is possible due to industry-standard VDCP support and the bundled media applications. The server comes with NEXIO Remote for ingest, playout and media management. NEXIO Playlist, included with the internal storage NEXIO Volt and optional for the shared storage NEXIO Volt, is an event sequencing application used for playing content to air. Both media applications control the server over a local area network (LAN).

The NEXIO FTP Server is provided to support file-based workflows. FTP via Ethernet connectivity supports network devices such as shared folders and near-line storage systems. Import and export of data to external devices is also facilitated through front and rear USB 2.0.

Remote monitoring and system management are easily enabled via SNMP. Support for NEXIO Navigator remote diagnostics and management is also standard. Since NEXIO Volt offers support for headless operation, a display, keyboard and mouse need not be connected to set up and manage system hardware. Channel control is supported via the industry-standard VDCP protocol and via NEXIO native protocol over Ethernet. The NEXIO Volt server responds in exactly the same way as the proven NEXIO AMP server, resulting in straightforward integration with existing automation systems.

HIGH-PERFORMANCE TECHNOLOGY

MediaCore Engine

MediaCore is a high-performance, 64-bit software engine that controls all low-level NEXIO Volt functionality. This multi-stream module manages real-time transactions and system status updates, as well as RAIDsoft, the NEXIO software RAID and disk storage management system. MediaCore employs task-specific, multi-core CPU/FPGA processing to efficiently handle all baseband video I/O. The result is real-time, high-bit-rate coding and decoding that enables NEXIO Volt to ingest and play out up to four channels simultaneously. The module can be controlled via the NEXIO suite of software applications, and third-party automation and control panels.

RAIDsoft Storage Protection

NEXIO Volt runs the Harris-patented and Emmy® Award-winning RAIDsoft software RAID management system, allowing all channels and network ports to simultaneously access content without restriction. The intelligent RAIDsoft system keeps a cached copy of the file allocation table (FAT) in RAM and on disk, adding exceptional system resiliency. This translates to fast searching for content and assured access to metadata, whether requested via VDCP serial or Ethernet control.

Integrated storage NEXIO Volt servers support the RAIDsoft RAID-3 scheme for protection against single-drive failures in a volume. Shared storage NEXIO Volt servers also support RAIDsoft RAID-3, as well as ECC parity to protect against two drive failures per volume and Intrinsic Mirroring to protect against the failure of an entire storage system. In addition, NEXIO Volt servers connected to shared storage support the latest Harris storage innovation, RAID-601, for NEXIO Farad™ high-performance storage systems.

Channel configurations

NEXIO Volt supports 2-, 3- and 4-channel operating modes. The available modes will depend on the licensing applied to the server via the NEXIO Software License Key (SLK). The following table lists all the available modes:

<table>
<thead>
<tr>
<th></th>
<th>SD Channels Enabled</th>
<th>HD Channels Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 channels</td>
<td>2 bi-directional (2B+0P)</td>
<td>2 bi-directional (2B+0P)</td>
</tr>
<tr>
<td>3 channels</td>
<td>Not available</td>
<td>1 record + 2 play (1R+2P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 record + 3 play (0R+3P)</td>
</tr>
<tr>
<td>4 channels</td>
<td>2 bi-directional + 2 Play (2B+2P)</td>
<td>2 record + 2 play (2R+2P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 record + 3 play (1R+3P)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 record + 4 play (0R+4P)</td>
</tr>
</tbody>
</table>

Integrated Storage Codec Support

NEXIO Volt integrated storage servers support a variety of codecs. Available codecs and data rates for the different channel counts are shown in the table below for NEXIO Volt integrated storage servers. MPEG-2 at 150 Mb/s and DNxHD are not available in 4-channel modes.

<table>
<thead>
<tr>
<th>HD Codec</th>
<th>2 Channels</th>
<th>3 Channels</th>
<th>4 Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI</td>
<td>MPEG-2 up to 150 Mb/s</td>
<td>XDCAM HD 35 Mb/s</td>
<td>XDCAM HD 35 Mb/s</td>
</tr>
<tr>
<td></td>
<td>XDCAM HD222 50 Mb/s</td>
<td>XDCAM HD222 50 Mb/s</td>
<td>XDCAM HD222 50 Mb/s</td>
</tr>
<tr>
<td></td>
<td>XDCAM EX 35 Mb/s</td>
<td>XDCAM EX 35 Mb/s</td>
<td>XDCAM EX 35 Mb/s</td>
</tr>
<tr>
<td></td>
<td>DVCPRO HD</td>
<td>H.264 (optional – only)</td>
<td>H.264 (optional – only)</td>
</tr>
<tr>
<td></td>
<td>AVC-Intra (record only)</td>
<td>H.264 (optional – only)</td>
<td>H.264 (optional – only)</td>
</tr>
<tr>
<td></td>
<td>H.264 (optional – play only)</td>
<td>H.264 (optional – play only)</td>
<td>H.264 (optional – play only)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SD Codec</th>
<th>2 Channels</th>
<th>3 Channels</th>
<th>4 Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI</td>
<td>MPEG-2 up to 50 Mb/s</td>
<td>DVCPRO25</td>
<td>DVCPRO25</td>
</tr>
<tr>
<td></td>
<td>DVCPRO50</td>
<td>DVCPRO50</td>
<td>DVCPRO50</td>
</tr>
<tr>
<td></td>
<td>XDCAM IMX 30/40/50</td>
<td>H.264 (optional – only)</td>
<td>H.264 (optional – only)</td>
</tr>
<tr>
<td></td>
<td>H.264 (optional – only)</td>
<td>H.264 (optional – only)</td>
<td>H.264 (optional – only)</td>
</tr>
</tbody>
</table>

Shared Storage Codec Support

NEXIO Volt shared storage servers support a variety of codecs. Available codecs and data rates for the different channel counts are shown in the table below for NEXIO Volt shared storage servers. Reduced choices for HD codecs exist for 3- and 4-channel modes because of available Ethernet bandwidth through Media Host gateways.
**NEXIO Volt™**
Compact 1RU Integrated and Shared Storage Transmission Servers

<table>
<thead>
<tr>
<th></th>
<th>2 Channels</th>
<th>3 Channel</th>
<th>34 Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HD Codecs</strong></td>
<td>MPEG-2 up to 150 Mb/s</td>
<td>MPEG-2 up to 100 Mb/s</td>
<td>MPEG-2 up to 50 Mb/s</td>
</tr>
<tr>
<td></td>
<td>XDCAM HD 35 Mb/s</td>
<td>XDCAM HD 35 Mb/s</td>
<td>XDCAM HD 35 Mb/s</td>
</tr>
<tr>
<td></td>
<td>XDCAM HD422 50 Mb/s</td>
<td>XDCAM HD422 50 Mb/s</td>
<td>XDCAM HD422 50 Mb/s</td>
</tr>
<tr>
<td></td>
<td>XDCAM EX 35 Mb/s</td>
<td>XDCAM EX 35 Mb/s</td>
<td>XDCAM EX 35 Mb/s</td>
</tr>
<tr>
<td></td>
<td>DVCPR0 HD</td>
<td>H.264 (optional – play only)</td>
<td>H.264 (optional – play only)</td>
</tr>
<tr>
<td></td>
<td>DNxHD (optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AVC-Intra (record only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H.264 (optional – play only)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|                  | MPEG-2 up to 50 Mb/s      | DVCPR025                   | DVCPR025                    |
|                  | DVCPR050                  | XDCAM (IMX 30/40/50)       | XDCAM (IMX 30/40/50)        |
|                  | H.264 (optional – play only) |            | H.264 (optional – play only) |

**OPTIONAL MEDIA APPLICATIONS FOR PERFORMANCE ENHANCEMENT**

Any of the following optional media applications can be added to NEXIO Volt to boost the performance of the server:

**Shared Storage Connectivity**
As the need for immediate content sharing grows, the NEXIO Volt integrated storage server can be reconfigured to connect to the NEXIO shared storage system via redundant gigabit Ethernet. This software change allows the server to enjoy the same level of content sharing as all other NEXIO servers — instant access to all content, all the time, by all users, without restrictions.

**NEXIO ClipSync™**
NEXIO ClipSync is an optional application that allows NEXIO Volt to play two clips in sync for key-plus-fill and similar applications when the two elements exist as separate clips.

**NEXIO Delay™**
NEXIO Delay is an optional application that applies a delay to an air channel for safety in live-to-air transmissions, or for time zone-specific playback delay.

**NEXIO Navigator**
NEXIO Navigator is an SNMP-based application that supports remote monitoring and diagnostics of NEXIO servers and network-attached devices, enabling potential problems to be identified before they impact the on-air product.

**NXA1000DNXH-D-SL**
Support is available for the Avid DNxHD® codec, enabling NEXIO AMP and NEXIO Volt servers to ingest and play out the Avid DNxHD format. The DNxHD codec is an option for NEXIO servers and is enabled by software license key. DNxHD is licensed on a per server (chassis) basis.

**NXA1000H264-SL**
H.264 is an optional codec available for NEXIO Volt servers and is enabled by software license key. H.264 codec (MPEG-4 Part 10) is supported for file ingest and baseband playout. H.264 is licensed on a per server (chassis) basis. Supporting H.264 allows NEXIO Volt servers to import native format content from file distribution systems, such as PathFire and PitchBlue, bypassing the need for additional transcoding.

**NEXIO AMP Track Router**
The NEXIO Track Router application (NXA-TR) is an optional media application for NEXIO servers and is enabled by software license key. It is supported in NEXIO NXOS and NEXIO Remote interface to control audio channel assignments, track order and audio and caption file import and export. Audio and closed caption files are imported via the NEXIO FTP server. Functionality is also available via automation control.

**NEXIO Remote**
NEXIO Remote is an application that provides a User Interface (UI) for NEXIO Volt control. If NEXIO Volt is controlled by the user’s automation system, then use of NEXIO Remote is not required. One NEXIO Remote license is included with every NEXIO Volt server. With NEXIO Remote, the operator is able to manually perform recordings, and play out and manage all the media assets on the server’s storage.

**NEXIO PlayList**
NEXIO PlayList is an event sequencing application that runs with NEXIO Remote for media playback. This enables pre-built playlists to be loaded and played back automatically. Each NEXIO Volt integrated storage server comes with one license for NEXIO PlayList. NEXIO PlayList is optional for shared storage versions of NEXIO Volt.

**NEXIO FTP Server and FTP Client**
The NEXIO FTP Server application enables the movement of material from server domain to server domain, and the import and export of material outside of the NEXIO server environment via Ethernet. The NEXIO FTP Client facilitates MXF file exchange and simplified transfer of Panasonic® P2 and Sony® XDCAM/XDCAM HD files (including access to multiple XDCAM decks via Ethernet).
NEXIO Volt™
Compact 1RU Integrated and Shared Storage Transmission Servers

IMAGES/DIAGRAMS

NEXIO Volt Integrated Storage Server
Status LEDs ➔ Power, Reset and Alarm Cancel ➔ SATA Boot Drive ➔ 2x USB Ports
LCD Status Display ➔ 5x SATA Media Drives

NEXIO Volt Shared Storage Server
Status LEDs ➔ Power, Reset and Alarm Cancel ➔ Mirrored Boot Drives
LCD Status Display ➔ 2x USB Ports

NEXIO Volt Rear Panel View
PS/2 Keyboard and Mouse ➔ RS-232 ➔ In 1, In 2 ➔ Loop 1, Loop 2 ➔ Out 2, Out 3, Out 4 ➔ Ref In
2x USB ➔ VGA ➔ 2x Gigabit Ethernet ➔ 4x RS-422
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**NEXIO Volt™**
Compact 1RU Integrated and Shared Storage Transmission Servers

**SPECIFICATIONS**
Specifications are subject to change without notice.

**System Configuration**
- **Mainframe**
  - 2 AMD Opteron 64-bit processors
  - PCIe platform
  - 16 GB RAM
  - Mirrored boot drive (shared storage version)
  - Five SATA media drives (internal storage version)
  - Two 10/100/1000Base-T Ethernet ports
  - VGA monitor interface
  - 4 USB 2.0 ports (2 front, 2 rear)
  - PS/2 keyboard and mouse ports
  - Windows® XP Professional x64 Edition

**Video Formats**
- **SD**
  - 525 @ 29.97 fps, 625 @ 25 fps
- **HD**
  - 1080i @ 29.97 fps and 25 fps
  - 720p @ 59.94 fps and 50 fps

**Input Channels and Formats**
- **Integrated Storage**
  - 8 or 16 channels per chassis up to 192 channels (300 or 600 GB) per NEXIO shared storage system up to 384 drives (300 or 600 GB) per NEXIO shared storage system using Patented Intrinsic Mirroring up to 8,96 drive stacks with NEXIO Farad

**Audio**
- **Channels and Formats**
  - 8 pairs embedded per video I/O channel
- **Input Channels**
  - BNC (embedded)
- **Output Channels**
  - BNC (embedded)
- **Processing and Storage**
  - 16-, 20- or 24-bit PCM, 48 kHz
- **Compressed Audio**
  - Dolby® Digital (AC3) and Dolby® E passthrough

**SD Encoding/Decoding: (Integrated and Shared Storage)**
- **MPEG-2 I-frame**
  - 4:2:0 (4 to 5 Mb/s), 4:2:2 (10 to 50 Mb/s)
  - IMX
  - 30, 40 and 50 Mb/s
- **DVCPRO25**
  - 25 Mb/s
- **DVCPRO50**
  - 50 Mb/s
- **DV Camera**
  - 5 Mb/s (625 only)
- **H.264** (optional)
  - 1 to 15 Mb/s (encode only)

**HD Encoding/Decoding: (Integrated Storage – 2 and 3 Channel)**
- **MPEG-2 I-frame**
  - 4:2:0 (50, 80 and 100 Mb/s)
  - 4:2:2 (50, 70, 80, 100, 120 and 150 Mb/s)
- **MPEG-2 Long-GOP**
  - 4:2:0 (18, 25, 35, 50, 60, 70 and 80 Mb/s)
  - XDCAM HD
  - 35 Mb/s
  - XDCAM HD422
  - 50 Mb/s
  - XDCAM EX
  - 35 Mb/s
  - DVCPRO HD
  - 100 Mb/s
  - AVC-Intra
  - 50 and 100 Mb/s (encode only)
  - DNXHD (optional)
  - 145, 220 Mb/s (NTSC) and 120, 185 Mb/s (PAL)
  - 8 and 10-bit
  - H.264 (optional)
  - 1 to 26+ Mb/s 8 and 10-bit (decode only)

**HD Encoding/Decoding: (Integrated Storage – 4 Channel)**
- **MPEG-2 I-frame**
  - 4:2:0 (50, 80 and 100 Mb/s)
  - 4:2:2 (50, 70, 80, 100, 120 and 150 Mb/s)
- **MPEG-2 Long-GOP**
  - 4:2:0 (18, 25, 35, 50, 60, 70 and 80 Mb/s)
  - 4:2:2 (25, 35, 50, 70 and 80 Mb/s)
  - XDCAM HD
  - 35 Mb/s
  - XDCAM HD422
  - 50 Mb/s
  - XDCAM EX
  - 35 Mb/s
  - DVCPRO HD
  - 100 Mb/s
  - AVC-Intra
  - 50 and 100 Mb/s (encode only)
  - H.264 (optional)
  - 1 to 26+ Mb/s 8 and 10-bit (decode only)

**Standard Channel Configurations**
- **SD**
  - 2 bidirectional channels
  - 2 bidirectional + 2 play-only channels
- **HD or Mixed SD/HD**
  - 2 bidirectional channels
  - 1 ingest-only + 2 play-only channels
  - 3 play-only channels
  - 2 ingest-only + 2 play-only channels
  - 4 play-only channels
  - Up/down/cross conversion support
  - *Channel configurations controlled by software license key
  - Some features may not be supported in all configurations; consult your sales representative for details

**Genlock Reference**
- **SD**
  - Bi-level sync support
- **HD**
  - Bi-level or tri-level sync support

**Outputs**
- **SD**
  - 4 SDI, BNC (SMPTE 259M)
- **HD or Mixed HD/SD**
  - 4 SDI, BNC (SMPTE 259M)
  - 2 SDI, active loop-throughs
  - 2 HD/SDI, active loop-throughs

**Aspect Ratio**
- **SD**
  - 16:9, 4:3
- **HD**
  - 16:9

**Aspect Ratio Conversion**
- Up/down/cross conversion support with EIA- 608<=>708 caption conversion

**AFD Support**
- Insert/override embedded AFD metadata on a per-ID or per-port basis

**Storage**
- **Integrated Storage**
  - 5 internal SATA media drives
  - 2 TB usable media storage
  - Reconfigurable to join a NEXIO SAN

**Audio**
- **Channels and Formats**
  - 8 pairs embedded per video I/O channel
  - **Input Channels**
    - BNC (embedded)
  - **Output Channels**
    - BNC (embedded)
  - **Processing and Storage**
    - 16-, 20- or 24-bit PCM, 48 kHz
  - **Compressed Audio**
    - Dolby® Digital (AC3) and Dolby® E passthrough

**SD Encoding/Decoding: (Integrated and Shared Storage)**
- **MPEG-2 I-frame**
  - 4:2:0 (4 to 5 Mb/s), 4:2:2 (10 to 50 Mb/s)
  - IMX
  - 30, 40 and 50 Mb/s
  - DVCPRO25
  - 25 Mb/s
  - DVCPRO50
  - 50 Mb/s
  - DV Camera
  - 5 Mb/s (625 only)
  - H.264 (optional)
  - 1 to 15 Mb/s (decode only)

**HD Encoding/Decoding: (Integrated Storage – 2 and 3 Channel)**
- **MPEG-2 I-frame**
  - 4:2:0 (50, 80 and 100 Mb/s)
  - 4:2:2 (50, 70, 80, 100, 120 and 150 Mb/s)
  - XDCAM HD
  - 35 Mb/s
  - XDCAM HD422
  - 50 Mb/s
  - XDCAM EX
  - 35 Mb/s
  - DVCPRO HD
  - 100 Mb/s
  - AVC-Intra
  - 50 and 100 Mb/s (encode only)
  - DNXHD (optional)
  - 145, 220 Mb/s (NTSC) and 120, 185 Mb/s (PAL)
  - 8 and 10-bit
  - H.264 (optional)
  - 1 to 26+ Mb/s 8 and 10-bit (decode only)

**HD Encoding/Decoding: (Integrated Storage – 4 Channel)**
- **MPEG-2 I-frame**
  - 4:2:0 (50, 80 and 100 Mb/s)
  - 4:2:2 (50, 70, 80, 100, and 120 Mb/s)
  - XDCAM HD
  - 35 Mb/s
  - XDCAM HD422
  - 50 Mb/s
  - XDCAM EX
  - 35 Mb/s
  - DVCPRO HD
  - 100 Mb/s
  - AVC-Intra
  - 50 and 100 Mb/s (encode only)
  - H.264 (optional)
  - 1 to 26+ Mb/s 8 and 10-bit (decode only)
HD Encoding/Decoding: (Shared Storage – 2 Channel)

MPEG-2 I-frame 4:2:0 (50, 80 and 100 Mb/s)
4:2:2 (50, 70, 80, 100, 120 and 150 Mb/s)
MPEG-2 long-GOP 4:2:0 (18, 25, 35, 50, 60, 70 and 80 Mb/s)
4:2:2 (25, 35, 50, 70 and 80 Mb/s)
XDCAM HD 35 Mb/s
XDCAM HD422 50 Mb/s
XDCAM EX 35 Mb/s
DVCPRO HD 100 Mb/s
AVC-Intra 50 and 100 Mb/s (encode only)
DNxHD (optional) 145, 220 Mb/s (NTSC) and 120, 185 Mb/s (PAL)
8 and 10-bit
H.264 (optional) 1 to 26+ Mb/s 8 and 10-bit (decode only)

HD Encoding/Decoding: (Shared Storage – 3 Channel)

MPEG-2 I-frame 4:2:0 (50, 80 and 100 Mb/s)
4:2:2 (50, 70, 80, and 100 Mb/s)
MPEG-2 long-GOP 4:2:0 (18, 25, 35, 50, 60, 70 and 80 Mb/s)
4:2:2 (25, 35, 50, 70 and 80 Mb/s)
XDCAM HD 35 Mb/s
XDCAM HD422 50 Mb/s
XDCAM EX 35 Mb/s
H.264 (optional) 1 to 26+ Mb/s 8 and 10-bit (decode only)

HD Encoding/Decoding: (Shared Storage – 4 Channel)

MPEG-2 I-frame 4:2:0 (50 Mb/s)
4:2:2 (50 Mb/s)
MPEG-2 long-GOP 4:2:0 (18, 25, 35, and 50 Mb/s)
4:2:2 (25, 35, and 50 Mb/s)
XDCAM HD 35 Mb/s
XDCAM HD422 50 Mb/s
XDCAM EX 35 Mb/s
H.264 (optional) 1 to 26+ Mb/s 8 and 10-bit (decode only)

Raid Redundancy

Controller RAIDsoft software RAID management system
RAID Protection Scheme RAID 3 (single-drive parity)
Integrated Storage
RAID Protection Scheme Shared Storage RAID 3 (single-drive parity)
ECC Parity (dual-drive parity)
Patented Intrinsic Mirroring (simultaneous mirrored shared storage)
Farad RAID-601 (dual-drive party, plus striping, plus patented Intrinsic Mirroring)

Timecode Support

Input/Output RS-232, TCP/IP, Harris clock interface
Read, generate and write VITC, including discontinuities

Remote Serial Interface

Input/Output 4 RS-422 ports, RJ-12 connector

Control

Input/Output RS-422
TCP/IP socket or UDP over Ethernet
Protocols NEXIO native protocol, VDCP, Sony 9-pin

Physical Characteristics

Dimensions (H x W x D) 1.75 x 19 x 26.25 in (4.4 x 48.3 x 66.7 cm)
Weight Integrated Storage, 28 lbs (12.7 kg)
Shared Storage, 27 lbs (12.3 kg)

Power

Power Supply Dual hot-swappable, dual load-sharing
Voltage 115 to 240 VAC
Current 8 to 4 A
Frequency 60 to 50 Hz
Total DC Output 650 W
Idle Consumption 144 W @ 240 V, 156 W @ 120 V
Peak Consumption 264 W @ 240 V, 296 W @ 120 V

Environmental

Operating Temperature 50° to 85° F (10° to 30° C)
Non-operating Temperature -40° to 158° F (-40° to 70° C)
Operating Relative Humidity 8% to 90% (non-condensing)
Non-operating Relative Humidity 5% to 95% (non-condensing)
Operating Altitude 10,000 ft (3,048 m) @ 77° F (25° C)
NEXIO Volt™
Compact 1RU Integrated and Shared Storage Transmission Servers

ORDERING INFORMATION

Integrated Storage NEXIO Volt Servers
NXVOLT1401HD2S ................. NEXIO Volt 1RU SD/HD integrated storage server, 2-channel SD-only
NXVOLT1401HD4S ................. NEXIO Volt 1RU SD/HD integrated storage server, 4-channel SD-only
NXVOLT1401HD2H ................. NEXIO Volt 1RU SD/HD integrated storage server, 2-channel SD/HD or 4-channel SD-only
NXVOLT1401HD3H ................. NEXIO Volt 1RU SD/HD integrated storage server, 3-channel SD/HD or 4-channel SD-only
NXVOLT1401HD4H ................. NEXIO Volt 1RU SD/HD integrated storage server, 4-channel SD/HD or 4-channel SD-only

Shared Storage NEXIO Volt Servers
NXVOLT1401HDX2S ............... NEXIO Volt 1RU SD/HD Shared Storage Server, 2-channel SD-only
NXVOLT1401HDX4S ............... NEXIO Volt 1RU SD/HD Shared Storage Server, 4-channel SD-only
NXVOLT1401HDX2H ............... NEXIO Volt 1RU SD/HD Shared Storage Server, 2-channel SD/HD or 4-channel SD-only
NXVOLT1401HDX3H ............... NEXIO Volt 1RU SD/HD Shared Storage Server, 3-channel SD/HD or 4-channel SD-only
NXVOLT1401HDX4H ............... NEXIO Volt 1RU SD/HD Shared Storage Server, 4-channel SD/HD or 4-channel SD-only

NEXIO Volt Channel Upgrades
NXAUPHD1 ..................... Software only – Add 1 HD channel. For NXVOLT1401HDX2H or NXVOLT1401HD2H and NXVOLT1401HDX3H or NXVOLT1401HD3H
NXAUPSD2 ..................... Software only – Add 2 SD channels. For NXVOLT1401HDX2S or NXVOLT1401HD2S

NEXIO Volt Spare Parts
NX1010SPS ................. Shelf spare or replacement 650 W power supply for NX1010 and NX1401 1RU chassis
NXVOLTHDXSLCD ........... Replacement front panel, including LCD panel, for NEXIO Volt Integrated Storage Server
NXVOLTHDXSLCD ........... Replacement front panel, including LCD panel, for NEXIO Volt Shared Storage Server
NXVOLT1401SIO .......... Spare baseband video I/O card assembly for NEXIO Volt
NX1010SATA160 .............. Spare 160 GB SATA System drive with carrier for NEXIO Volt internal and shared storage servers
NXVOLT-SATA500 .......... Spare 500 GB SATA Media drive with carrier for NEXIO Volt HDI internal storage server

NEXIO Volt Service Contracts
NXVOLT-BASIC ............... 1-Year Basic ServicePAK for NEXIO Volt
NXVOLT-GOLD ............... 1-Year Gold ServicePAK for NEXIO Volt

NEXIO Volt Optional Codecs
NXA1000DNXHD-SL ....... Avid DNxHD Codec Server License. Software license key enables NEXIO Volt to ingest and play out the Avid DNxHD format. 1 license required per chassis
NXA1000H264-SL ........ H.264 Codec Server License. Software license key enables NEXIO Volt to import files and play out baseband using the H.264 codec. 1 license required per chassis