Avedia Server c1520

Compact 1U hardware platform

The c1520 provides a flexible hardware platform for Avedia Server installations and is ideal for small to medium IPTV environments.

Interfaces

- Four 802.3 100/1000 Ethernet (RJ-45) sockets plus IPMI
- Serial, VGA, 4 x USB

Storage

- Fixed 1TB

Physical Format

- Compact 1U rack-mounted standard 19" chassis
- Chassis dimensions: W: 426mm x D: 370mm x H: 43mm
- Weight: 5.65kg

Environment

- Operating temperature range: 10° to 35°C (50° to 95°F)
- Non-operating temperature range: -40° to 70°C (-40° to 158°F)
- Operating humidity range: 8% to 90%
- Non-operating humidity range: 5% to 95%

Power

- Internal power supply
- AC input: 100-240V, 60-50Hz, 3-1.5A Max
- Power consumption: Typical 70W, Max 120W

Features & Benefits

- Single hard disk
- Four 1GB Ethernet ports
- Compact 1U rack mountable chassis

Regulatory

- CE:
  - IEC 62368-1: 2014
  - EN 62368-1:2014+A11:2017
  - EN55032:2012 + corrigenda Aug 2012 & Dec 2012
  - EN55024:2010 + A1:2015
  - EN 61000-3-2:2014
  - EN 61000-3-3:2013
- UL/CSA:
  - UL62368-1:2014
  - CSA C22.2 No. 62368-1, Rev. February 17, 2012
- FCC:
  - 47CFR:2011 Part 15, Sub Part B
  - ANSI C63-4:2014
- Australia/New Zealand:
  - AS/NZS 62368.1:2018

In the Box

- Avedia Server c1520 Hardware Platform (fixed 1TB content storage)
- Power cord & Product Safety Brochure (hard copy)

Ordering Information (P/N)

- 18341-xx   Avedia Server - c1520 server

xx denotes the power cord variant (uk, eu, us, au)

Chassis and Software Module Compatibility															
Core Software Modules			Bandwidth Options							Hard Disk RAID Options					
										RAID 10					
m8105	m8115	m8365	110 Mbs	220 Mbps	550 Mbps	1000 Mbps	2000 Mbps	3000 Mbps	6000 Mbps	4TB	8TB	16TB	24TB	32TB	48TB
c1520 ✓	✓	✓	✓	✓											
c1565 ✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		
c1585 ✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓
v1600 ✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						

VITEC

Avedia Server c1565

Enterprise class 1U hardware platform

The c1565 provides an enterprise class hardware platform for Avedia Server installations, delivering IPTV system control and client features in the most demanding of networks.

Interfaces

- Four 802.3 100/1000 Ethernet (RJ-45) sockets plus IPMI
- Serial, VGA, 4 x USB

Storage

- Four SATA hot swap disk bays
- Hardware based RAID controller

Disk Option	SD Video (hours)	HD Video (hours)
4TB (RAID10)	1300	400
8TB (RAID10)	2600	800
16TB (RAID10)	5200	1600
24TB (RAID10)	7800	2400

Physical Format

- Compact 1U rack-mounted standard 19″ chassis
- Chassis dimensions: W: 437mm x D: 540mm x H: 43mm
- Weight: 18kg (fully loaded)

Environment

- Operating temperature range: 10° to 35°C (50° to 95°F)
- Non-operating temperature range: -40° to 70°C (-40° to 158°F)
- Operating humidity range: 8% to 90%
- Non-operating humidity range: 5% to 95%

Power

- Type: 400W dual redundant auto-switching
- AC Input: 100–240V, 60–50Hz, 6-3A
- Power consumption: Typical 100W, Max 150W

Features & Benefits

- Up to 24 TB of RAID 10 disk storage
- Dual redundant power supplies
- Four 1Gb ports in a compact 1U rack mountable chassis
- Four SATA hot swap disk bays to minimise down time

Regulatory

- CE:
  - IEC 62368-1: 2014
  - EN 62368-1:2014+A11:2017
  - EN55032:2012 + corrigenda Aug 2012 & Dec 2012
  - EN55024:2010 + A1:2015
  - EN 61000-3-2:2014
  - EN 61000-3-3:2013
- UL/CSA:
  - UL62368-1:2014
  - CSA C22.2 No. 62368-1, Rev. February 17, 2012
- FCC:
  - 47CFR:2011 Part 15, Sub Part B
  - ANSI C63-4:2014
- Australia/New Zealand:
  - AS/NZS 62368.1:2018

In the Box

- Box 1:
  - Avedia Server c1565 Hardware Platform
  - Rack mounting rail brackets
  - 2 power cords
  - Product Safety Brochure (hard copy)
  - Disk Installation Instruction Guide
- Box 2:
  - 4 hard disks, pre-mounted in hot-swap caddies

Ordering Information (P/N)

Hardware Platforms

- 18342-xx   Avedia Server - c1565 hardware platform 1U, 4TB RAID
- 18343-xx   Avedia Server - c1565 hardware platform 1U, 8TB RAID
- 18344-xx   Avedia Server - c1565 hardware platform 1U, 16TB RAID
- 06033-xx   Avedia Server - c1565 hardware platform 1U, 24TB RAID
- 06039-xx   PSU - c1565 replacement power supply

xx denotes the power cord variant (uk, eu, us, au)

Chassis and Software Module Compatibility																
	Core Software Modules			Bandwidth Options							Hard Disk RAID Options					
											RAID 10					
	m8105	m8115	m8365	110 Mbs	220 Mbps	550 Mbps	1000 Mbps	2000 Mbps	3000 Mbps	6000 Mbps	4TB	8TB	16TB	24TB	32TB	48TB
c1520	✓	✓	✓	✓	✓											
c1565	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		
c1585	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓
v1600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						

Avedia Server c1585

Enterprise class 2U hardware platform

The c1585 provides an enterprise class hardware platform for Avedia Server installations, delivering IPTV system control and client features in the most demanding of networks.

Interfaces

- Two 802.3 1G/10G Ethernet (RJ-45) sockets plus IPMI
- Serial, VGA, 4 x USB

Storage

- Eight SATA hot swap disk bays
- Hardware based RAID controller

Disk Option	SD Video (hours)	HD Video (hours)
8TB (RAID10)	2600	800
16TB (RAID10)	5200	1600
32TB (RAID10)	10400	3200
48TB (RAID10)	15600	4800

Maximum Load

- ArtioView
  - 10,000 unique end points (portals)
    or
  - 400 Mbps recording
    or
  - 1800 VoD sessions
    or
  - A pro-rated mix of the above

- A suggested mixed model (ArtioView) is:
  - 6000 unique end points (portals)
  - 400 Mbps recording
  - 720 VoD sessions

Please contact VITEC to accurately specify this server platform.

Features & Benefits

- Up to 48TB of RAID 10 disk storage
- Dual redundant power supplies
- Two 10GB ports in a compact 2U rack mountable chassis
- Eight SATA hot swap disk bays to minimise down time

Physical Format

- Compact 2U rack-mounted standard 19" chassis
- Chassis dimensions: W: 437mm x D: 647mm x H: 89mm
- Weight: 30kg (fully loaded)

Power

- Type: 740W dual redundant auto-switching
- AC Input: 100–240V, 60–50Hz, 10-5A
- Power consumption: Typical 150W, Max 225W

Environment

- Operating temperature range: 10° to 35°C (50° to 95°F)
- Non-operating temperature range: -40° to 70°C (-40° to 158°F)
- Operating humidity range: 8% to 90%
- Non-operating humidity range: 5% to 95%

Regulatory

- CE:
  - IEC 62368-1: 2014
  - EN 62368-1:2014+A11:2017
  - EN55032:2012 + corrigenda Aug 2012 & Dec 2012
  - EN55024:2010 + A1:2015
  - EN 61000-3-2:2014
  - EN 61000-3-3:2013
- UL/CSA: UL62368-1:2014
  - CSA C22.2 No. 62368-1, Rev. February 17, 2012
- FCC:
  - 47CFR:2011 Part 15, Sub Part B
  - ANSI C63-4:2014
- Australia/New Zealand:
  - AS/NZS 62368.1:2018

In the Box

- Box 1:
  - Avedia Server c1585 Hardware Platform
  - Rack mounting rail brackets
  - 2 power cords
  - Product Safety Brochure (hard copy)
  - Disk Installation Instruction Guide
- Box 2:
  - 4 hard disks, pre-mounted in hot-swap caddies

Ordering Information (P/N)

- 06034-xx   Avedia Server c1585 hardware platform 2U, 8TB RAID, 8 disk slots, hardware RAID control
- 06035-xx   Avedia Server c1585 hardware platform 2U, 16TB RAID, 8 disk slots, hardware RAID control
- 06036-xx   Avedia Server c1585 hardware platform 2U, 32TB RAID, 8 disk slots, hardware RAID control
- 06037-xx   Avedia Server c1585 hardware platform 2U, 48TB RAID, 8 disk slots, hardware RAID control

xx denotes the power cord variant (uk, eu, us, au)

Chassis and Software Module Compatibility																
	Core Software Modules			Bandwidth Options							Hard Disk RAID Options					
											RAID 10					
	m8105	m8115	m8365	110 Mbs	220 Mbps	550 Mbps	1000 Mbps	2000 Mbps	3000 Mbps	6000 Mbps	4TB	8TB	16TB	24TB	32TB	48TB
c1520	✓	✓	✓	✓	✓											
c1565	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		
c1585	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓
v1600	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						

m9500 Media Player
4K UHD IPTV end-point

4K UHD IPTV end-point which delivers interactive viewing portals and advanced network video decoding. Its fanless design, PoE functionality and low power consumption make it an economical choice for environments where premium video quality is important.

Video Output

- HDMI v2.0 (with HDCP 1.4):
- 2160p (50Hz/59.94Hz/60Hz)
- 1080p, 720p (50Hz/59.94Hz/60Hz)
- 576p (50Hz)
- 480p (59.94Hz/60Hz)

Audio Output

- HDMI: 2 channel PCM

Video Decoding

- H.265 HEVC, up to 2160p50 with Main 10 Profile (10-bit colour) or 2160p60 with Main profile (8-bit colour)
- MPEG-4 part 10 H.264 (ISO/IEC 14496-10). Resolutions up to 2160p60
- MPEG-2 (ISO/IEC 13818-2). Resolutions up to Full HD 1080p60

Audio Decoding

- MPEG-1 Layer II (ISO/IEC 11172-3)
- AC3/EAC3
- AAC-LC/HE-AAC

Streaming

- MPEG-2 Transport Stream (ISO/IEC 13818-1)
- Stream playback synchronised across multiple media players
- UDP
- RTP
- SRT
- HLS VOD (pause, play, fast-forward, rewind, position)
- IP multicast, IP unicast
- IGMPv2

Infra-red/Control Options

- Built-in IR receiver
- 3.5mm jack for IR extender
- TV on/off control using HDMI CEC
- Third-party IR remote controls supported

Features & Benefits

- Support IPTV streams up to 4K for excellent image quality
- Enable viewers to enjoy live and recorded TV, movies, information and more, all accessed via user interfaces created with ArtioView, our interactive IPTV technology solution
- Support for the VITEC Content Protection Solution
- Quiet, fanless design
- Plug-and-play connectivity with Power over Ethernet (PoE)
- Stream playback synchronised across multiple media players
- Built-in AV mode finds and displays TV and radio channels within a minute of initial startup

Content Protection

- Decryption of AES-protected content as part of the VITEC Content Protection Solution

Integrated Web Browser

- Chromium-based TV Browser for digital signage and integration with third party middleware:
  - CSS 3 & DOM 3
  - Image formats: PNG, JPEG
- ArtioView interactive middleware portal
- AV mode

Channel Management

- Channel selection and volume/mute control through either:
  - ArtioView portals
  - Avedia Server Smart Control application
  - AV mode (live channel support only)
- SAP/SDP announcements
- Channel import (static channels) in AV mode
- Channel redundancy & failover to channel

Plug and Play

• Built-in AV mode finds and displays TV and radio channels within a minute of initial startup

Accessibility

• DVB subtitles (ETSI EN 300 743)
• Teletext subtitles (ETSI EN 300 706)

Security

• Secure hardware platform
• Management using HTTPS connection
• Firmware upgrade using VITEC-signed upgrades only

Network

• Linux IPv4 stack
• DHCP IP addressing
• IEEE 802.3u 10/100Mbps MDIX Ethernet
• IEEE 802.3af PD
• IEEE 802.1x network authentication

Management

• HTTPS web admin interface; Chrome® recommended
• Web interface certificate management
• Installation and Configuration Guide online help and PDF
• Admin menu & console access via SSH and Serial RS232 Admin Port
• Event logging via Syslog (local and remote)
• Day-to-day management using the Avedia Server Smart Control application:
  - Reboot
  - Set channel
  - Set volume
  - Turn on/off
• Administration using the Avedia Server Site Manager application:
  - Upgrade
  - Set name and location
  - Configuration import/export
• Advanced RESTful configuration through the Site Manager Command Sender
• Reset button (reboot or factory reset)

System

• Linux-based

Miscellaneous

• LED front panel
• Dark mode

Options

• TV and wall mounting brackets
• External AC-DC Power supply for non-POE environments
• IR remote controls and extenders

Protocols

IP (RFC791), UDP (RFC768), TCP (RFC793), ARP (RFC826), DNS (RFC1035), DHCP (RFC2131), ICMP (RFC0792), IGMP v3 (RFC 3376), HTTP (RFC2616), Syslog (RFC3164), NTP (RFC1305), HLS, SSDP

Environment

• Operating temperature: 0 ...+40°C / +32 ... +104°F
• Storage temperature: -20 ...+70°C / -4 ... +158°F
• Operating Relative Humidity: 5 – 95% (non-condensing)

Dimensions

• 35mm (H) x 140mm (L) x 95mm (D)

Weight

• 0.4 kg

Power

• DC Jack (24V): 5W typical, 8W maximum
• POE IEEE 802.3af PD (48V): 5W typical, 8W max

Regulatory

• CE/UKCA:
  - IEC 62368-1: 2014
  - EN 62368-1:2014+A11:2017
  - EN55032:2015
  - EN 61000-3-2:2019
  - EN 61000-3-3:2013
  - EN55035:2017 / CISPR 35:2016
• UL/CSA:
  - UL62368-1:2014 (Ed.2)
  - CSA C22.2 No. 62368-1, Rev. December 01, 2014 (Ed.2)
• FCC:
  - 47CFR Part 15, Sub Part B
  - ANSI C63-4:2014
• RCM:
  - AS/NZS 62368:2018

MTBF

• Calculated to MIL-HDBK-217F, notice 2: 147,885 hours (16.9 years)

ArtioView

The m9500 has been designed specifically for use with ArtioView, VITEC's middleware. It enables organisations to deliver a captivating video experience through advanced network video decoding and 4K video capability. It offers the following:

  - Live TV channels
  - Programme Guide
  - Video on Demand
  - Channel recording
  - Information pages
  - View (create layers)
  - Room service
  - Hotel services

In the Box

• m9500 Media Player, single 4K UHD AV (HDMI) out, PoE (802.3af); includes ArtioView client licence
• Product Safety Brochure (hard copy)

Ordering Information (P/N)

• 18373 - m9500 - Media Player - single UHD AV (HDMI) out, PoE (802.3af), ArtioView client licence

www.vitec.com

m9505 Media Player
4K digital signage end-point with local storage

The m9505 Media Player offers superior performance and can store up to 3 hours of 4K video content, whilst enabling a complete end-to-end Avedia IP video solution for delivery of stunning digital signage.

Video Output
- HDMI v2.0 (with HDCP 1.4):
  - 2160p, 1080p, 720p (50Hz/59.94Hz/60Hz)
  - 576p (50Hz)
  - 480p (59.94Hz/60Hz)

Audio Output
- HDMI: 2 channel PCM

Video Decoding
- H.265 HEVC, up to 2160p50 with Main 10 Profile (10-bit colour) or 2160p60 with Main profile (8-bit colour)
- MPEG-4 part 10 H.264 (ISO/IEC 14496-10). Resolutions up to 2160p60
- MPEG-2 (ISO/IEC 13818-2). Resolutions up to Full HD 1080p60

Audio Decoding
- MPEG-1 Layer II (ISO/IEC 11172-3)
- AC3/EAC3
- AAC-LC/HE-AAC

Streaming
- MPEG-2 Transport Stream (ISO/IEC 13818-1)
- Stream playback synchronised across multiple media players
- UDP
- RTP
- SRT
- HLS VOD (pause, play, fast-forward, rewind, position)
- IP multicast, IP unicast
- IGMPv2

Infra-red/Control Options
- Built-in IR receiver
- 3.5mm jack for IR extender
- TV on/off control using HDMI CEC
- Third-party IR remote controls supported

Content Protection
- Decryption of AES-protected content as part of the VITEC Content Protection Solution

Features & Benefits
- Play back dynamic ArtioSign digital signage content, combining text, graphics and videos to engage audiences
- Support IPTV streams up to 4K for excellent image quality
- Support for the VITEC Content Protection Solution.
- Enable viewers to enjoy live and recorded TV, movies, information and more
- Combine 4K video with full HD graphics and animations
- Store up to 3 hours of 4K video content
- Quiet, fanless design
- Plug-and-play connectivity with Power over Ethernet (PoE)
- Stream playback synchronised across multiple media players
- Built-in AV mode finds and displays TV and radio channels within a minute of initial startup

Integrated Web Browser
- Chromium-based TV Browser for digital signage and integration with third party middleware:
  - CSS 3 & DOM 3
  - Image formats: PNG, JPEG
- Graphics resolution up to 1920x1080

Channel Management
- Channel selection and volume/mute control through either:
  - Avedia Server Smart Control application (ArtioSign playlists)
  - AV mode middleware (TV and radio channels)
- SAP/SDP announcements
- Channel import (static channels) in AV mode
- Channel redundancy & failover to channel

Plug and Play
- Built-in AV mode finds and displays TV and radio channels within a minute of initial startup

Storage Capacity
• 32GB for video and digital signage content storage

Accessibility
• DVB subtitles (ETSI EN 300 743)
• Teletext subtitles (ETSI EN 300 706)

Security
• Secure hardware platform
• Management using HTTPS connection
• Firmware upgrade using VITEC-signed upgrades only

Network
• Linux IPv4 stack
• DHCP IP addressing
• IEEE 802.3u 10/100Mbps MDIX Ethernet
• IEEE 802.3af PD
• IEEE 802.1X network authentication

Management
• HTTPS web admin interface; Chrome® recommended
• Web interface certificate management
• Installation and Configuration Guide online help and PDF
• Admin menu & console access via SSH and Serial RS232 Admin Port
• Event logging via Syslog (local and remote)
• Day-to-day management (reboot, publish signage, set channel/volume, turn on/off) using the Avedia Server Smart Control application
• Administration using the Avedia Server Site Manager application:
  - Upgrade
  - Set name and location
  - Configuration import/export
• Advanced RESTful configuration through the Site Manager Command Sender
• Reset button (reboot or factory reset)

System
• Linux-based

Miscellaneous
• LED front panel
• Dark mode

Options
• TV and wall mounting brackets
• External AC-DC Power supply for non-POE environments
• IR remote controls and extenders
• ArtioSign® Display digital signage licence

Additional Features
• Accelerated channel change mode (sub 500ms (transcoder required))
• Unit-to-unit sync capability

Protocols
IP (RFC791), UDP (RFC768), TCP (RFC793), ARP (RFC826),
DNS (RFC1035), DHCP (RFC2131), ICMP (RFC0792),
IGMP v3 (RFC 3376), HTTP (RFC2616), Syslog (RFC3164),
NTP (RFC1305), HLS, SSDP

Environment
• Operating temperature: 0 ...+40°C / +32 ... +104°F
• Storage temperature: -20 ...+70°C / -4 ... +158°F
• Operating Relative Humidity: 5 – 95% (non-condensing)

Dimensions
• 35mm (H) x 140mm (L) x 95mm (D)

Weight
• 0.4 kg

Power
• DC Jack (24V): 5W typical, 9W maximum
• POE IEEE 802.3af PD (48V): 5W typical, 9W max

Regulatory
• CE/UKCA:
  - IEC 62368-1: 2014
  - EN 62368-1:2014+A11:2017
  - EN55032:2015
  - EN 61000-3-2:2019
  - EN 61000-3-3:2013
  - EN55035:2017 / CISPR 35:2016
• UL/CSA:
  - UL62368-1:2014 (Ed.2)
  - CSA C22.2 No. 62368-1, Rev. December 01, 2014 (Ed.2)
• FCC:
  - 47CFR Part 15, Sub Part B
  - ANSI C63-4:2014
• RCM:
  - AS/NZS 62368:2018

MTBF
• Calculated to MIL-HDBK-217F, notice 2: 139,548 hours (15.9 years)

ArtioSign
ArtioSign combines 4K video with full HD graphics to produce great looking digital signage content which can be played back on the m9505. ArtioSign provides the following elements which can be used to create digital signage content:

  - Streamed & local video (up to 4K 2160p60)
  - Images (up to 1920x1080)
  - Text (static/multiline/scrolling)
  - Point of Sale integration with Oracle® Simphony
  - RSS feeds (scrolling)
  - PDF/PowerPoint import
  - Date/time
  - Browser
  - Meeting Room
  - Weather (up to 5 day forecast)

In the Box
• m9505 Media Player, single 4K UHD AV (HDMI) out, 32GB storage, PoE (802.3af); includes ArtioView client licence
• Product Safety Brochure (hard copy)

Ordering Information (P/N)
• 18374 - m9505 - Signage Media Player - single UHD AV (HDMI) out, 32 GB storage

VITEC   www.vitec.com