

**Overview**

Designed specifically for streaming TV and media around a home, the Nebula Home Media Server (HMS) is a compact, efficient, and highly functional means of delivering digital media content around a local area network (LAN).

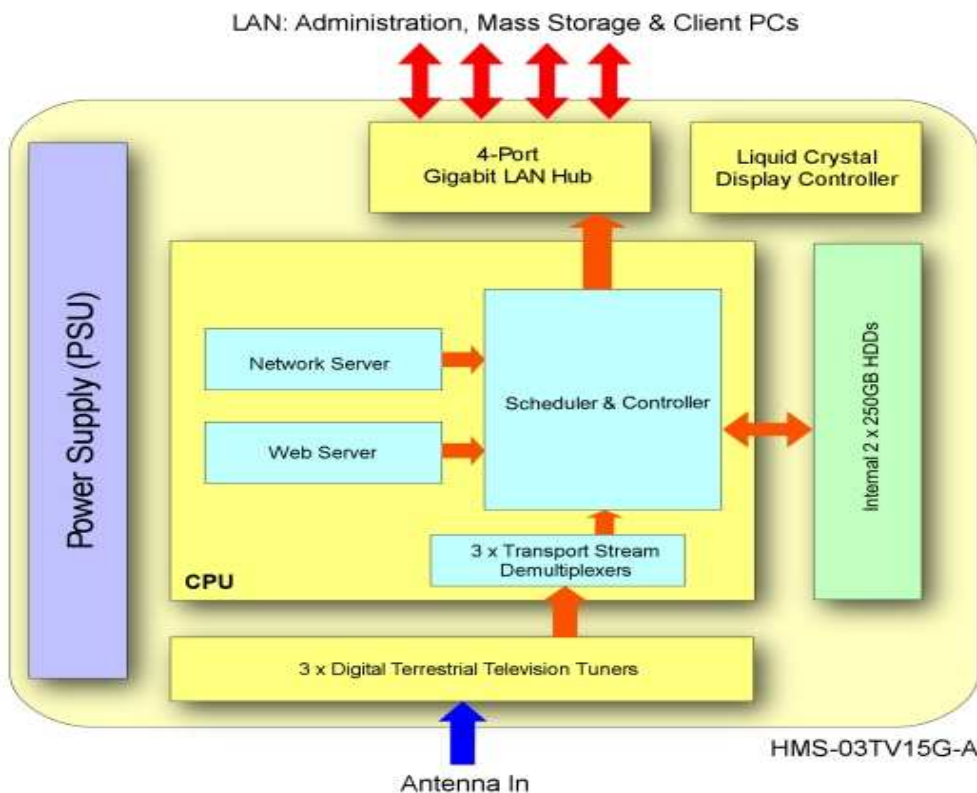


The HMS-03TV15G-A is highly configurable and so will find other applications in areas outside of domestic content delivery, such as advertisement and information streaming to large-format retail displays:

The HMS incorporates 3 embedded Digital Terrestrial TV tuners so that live content Digital Television can be distributed around any suitable network. Because there are 3 tuners, there is almost complete independence as to which channel can be viewed at each client terminal. The sophisticated internal software will also allow the digital recording of programmes to half a terabyte of internal storage for later retrieval, and the extra tuners ensure that recordings can be made regardless of which channels are being viewed at the time.

All of the video and audio held within the HMS can be accessed by any of the clients at all times, and a wide range of standard formats, both broadcast and non-broadcast are supported.

**Block Diagram**



**Basic Hardware Features**

- 4 x Gigabit LAN Ports
- On-board 2x250GB Storage
- 1GB installed RAM
- 3 x DigiTV Digital Tuners
- 16x2 Character Backlit Status Display
- Fully DVB-t compliant

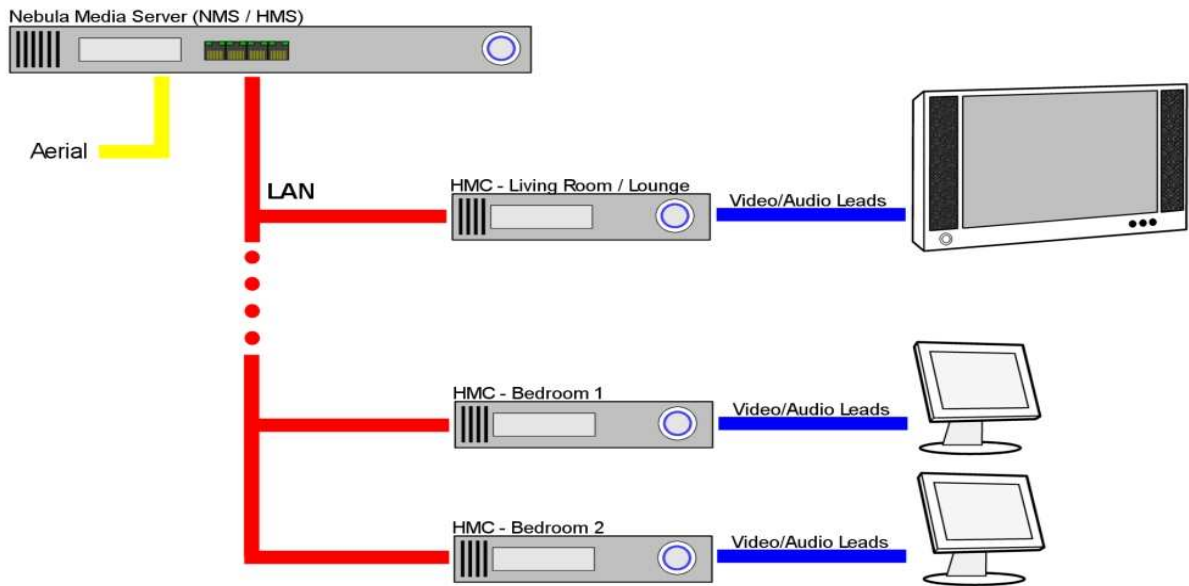
**Example Applications**

- Serving Live and recorded TV/Radio to each room in a house
- Serving Live and recorded media to students at School, College or University
- A high-end digital media server for homes or apartment complexes equipped with a LAN
- An advertisement server for large-format displays

Four Gigabit LAN ports on the rear panel provide a high bandwidth interface to connect the Media Server to a limited number of clients using point-to-point unicast, or a potentially unlimited number of clients using multicast packet transmission.

Administration and communication with the server is accomplished either locally or remotely using a standard web-browser over Hypertext Transfer Protocol (HTTP) via a series of comprehensive pages served from the HMS-03TV15G-A.

**Example Network Connectivity**



**Networks Clients**

The network media clients consist of an HMC-15G-A for each room in which the TV/Radio is to be viewed. These special devices are practically silent in operation with no moving parts aside from a very small internal fan and so can be placed unobtrusively wherever is convenient in a room. They attach to the network via a single LAN port on the rear of the device, and provide video out on a standard 15-pin monitor connector, plus 5.1 audio ready for amplification.

Control over the unit is by means of a 56 button remote control, and the status is continuously displayed on the front-mounted backlit LCD display.

The HMC-15G-A offers an extremely full featured Media Viewing/PVR environment and caters for both able and disabled users by featuring both Audio Description decoding (where transmitted) and DVB Subtitling. An integrated MHEG-5 decoder means that Digital Teletext and interactive services can also be viewed.

**Technical Specifications**

**General**

- Dimensions: 430 x 360 x 44.5 mm
- Power: 180W
- 16 character x 2 line backlit LCD status display

**Interface**

- 4-Port Gigabit Hub
- 10Base-T, Ethernet 100Base-TX, Ethernet 1000Base-T
- Bandwidth: 10GBits/Sec (non-blocking)
- Latency 10µS max
- 256K Packet Buffer
- Multicast and Unicast capability

**Onboard Storage**

- 2 x 250GB Hard Disk Drives
- 7200 RPM spindle speed
- RAID 0, 1 and 5 supported

**Each Digital Tuner**

- Input Sensitivity: -20dbm (Max) to -82dbm (Picture Loss)
- Antenna Pass-through Amplification: 3dB
- DVB Compliant (EN 300-468)

**Supported Video formats**

- Standard Definition MPEG1 & MPEG2 (MP@ML)
- High Definition MPEG2 (MP@HL)
- Standard Definition MPEG4
- Standard Definition H.264 (AVC)
- High Definition H.264 (AVC)
- Windows Media Video (WMV)

**Supported Audio Formats**

- MPEG 1 Layers 1, 2 and 3
- MPEG 2 Layer 1 Surround Sound (AC3)
- MPEG 4 Surround Sound (AAC)
- Windows Media Audio (WMA)



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