

Cisco 8685DVB MPEG-4 HD Media Server with Dot Matrix Display

The Cisco® 8685DVB MPEG-4 High-Definition (HD) Media Server with Dot Matrix Display offers subscribers some of the latest enhancements in cable television viewing. It combines multiple compelling video services into one integrated unit. This dual video tuner DVR features MPEG-4 Part 10/H.264 SD/HD capability and robust interactive capability using the DOCSIS®/EuroDOCSIS™ 2.0+ cable modem. The Cisco 8685DVB provides consumers a rich home entertainment experience with HD picture clarity, the movie theatre experience of surround sound, personalized recording with Personal Video Recording (PVR) control, and the convenience of on-demand services such as Video-on-Demand (VOD).

The 8685DVB is compliant with DVB-C standards, MPEG-2 and MPEG-4 standards, supports PAL video formats, and complies with required safety, emissions, and immunity specifications (as per the mandatory laws that may be applicable to Cisco). With its SmartCARD reader, it is built to support renewable security.

Figure 1. Cisco 8685DVB MPEG-4 HD Media Server (image may vary from actual product and specification)



Features

- Multi-Format video decoder capable of High-Definition MPEG-2, MPEG-AVC/H.264 decoding
- Supports multiple output formats (576i, 576p, 720p, 1080i and 1080p) to allow optimum picture performance with both standard TVs and HDTVs
- Internal 320 GB hard disk drive
- Embedded DOCSIS/EuroDOCSIS 2.0 cable modem with support for downstream channel bonding
- Dual DVB-C Video Tuners and separate data tuner for cable modem
- Connects an HDTV to the set-top through the HDMI™ connector
- Digital audio output to connect easily to high-end audio equipment
- SCART output to connect to standard definition TVs or VCRs
- Ethernet ports for connection to video source or connected home residential gateway
- 16-character dot matrix display for channel or program information (application software dependent)
- USB 2.0 port for connectivity

Figure 2. Cisco 8685DVB Front Panel (image may vary from actual product and specification)



Table 1. Front Panel Features

Feature	Description
Controls	6 buttons: ON/STANDBY, CH-, CH+, VOL-, VOL+, RECORD
Display	16-character, VFD Dot Matrix Display with 6 icons
Indicators	1 LED indicator for Power on/standby
Other	IR Receiver

Figure 3. Cisco 8685DVB Back Panel (image may vary from actual product and specification)



Table 2. Back Panel Features

Feature	Description
Connections In	Cable In (75 ohm female IEC connector)
Connections Out	<ul style="list-style-type: none">• HDMI• TV SCART• Audio L/R• SPDIF Digital Audio (Optical)• Dual 10/100 Ethernet• USB 2.0 Host Port
Other	ISO7816 SmartCARD
Power Cord	Removable
Power Switch	ON/OFF Rocker Switch

Product Specifications

Table 3. Product Specifications

Specification	Value
Audio/Video Outputs	
Inputs and Outputs	<ul style="list-style-type: none"> • 75 ohm female IEC connector RF input • HDMI output • TV SCART output • Audio L/R outputs • Digital audio output - Optical type
HDMI Output with HDCP Copy Protection and 3DTV Extensions	<ul style="list-style-type: none"> • High-Definition Multimedia Interface (HDMI) provides uncompressed digital video and audio in a simple, user-friendly connector • HDMI combined with HDCP (High Bandwidth Digital Content Protection) is designed to provide the optimal, secure connection to an HDTV that supports the HDMI with HDCP interface • Supports 3DTV Extensions from HDMI
USB 2.0 High-Speed Data Output Rear Panel	<p>Provides a 480 Mbps output for connection to devices such as external hard drives*</p> <p><i>*USB support requires middleware and application support for functionality</i></p>
Tuning and Decoding	
Multi-Format Video Decoder	<ul style="list-style-type: none"> • Allows decoding and presentation of audio and video in both MPEG-2 and MPEG-4 Part 10 formats • SD Model Formats: MPEG-2 MP@ML; MPEG-4 Part 10 MP@ Level 3.0 and HP@ Level 3.0 • HD Model Formats: MPEG-2 MP@ML and MP@HL; MPEG-4 Part 10 MP@ Level 3.0/4.0/4.1 and HP@ Level 3.0/4.0/4.1 • Supports multiple decode formats (576i, 576p, 720p, 1080i or 1080p) to allow optimum picture performance with both SD TVs and HD TVs
Multi-Format Audio Decoder	Enables tuning of digital audio MPEG-1 layer I/II, MP3, MPEG-2 layer II, AC3 Dolby™ Digital; MPEG-4 AAC audio formats
Embedded DOCSIS/EuroDOCSIS 2.0 Cable Modem with dedicated 324 MHz Processor	<ul style="list-style-type: none"> • Allows IP-based, real-time, two-way communications between the set-top and the headend • The cable modem has a separate processor from the main CPU to achieve optimum performance without impacting set-top functions • Supports downstream channel bonding of tuners to support Video Over DOCSIS implementations.
Dual 10/100 Ethernet Outputs	Allows connection to an external cable modem to allow interactive services such as VOD. Alternately, the Ethernet port can provide high-speed cable modem data service when connected to a PC
Powerful Graphics Engine	<ul style="list-style-type: none"> • OpenGL ES 1.0 3D Graphics Engine • Enables high-resolution graphics up to 720 x 576
Memory/Storage	
DVR with 320 GB Hard Drive	<ul style="list-style-type: none"> • The 320 GB hard drive is designed to allow up to 160 hours* of SD programs to be recorded and stored using DVR functions • Gives subscribers complete control over watching, pausing, rewinding, replaying, and fast forwarding live programs using the remote control <p><i>*The total program hours that can be stored depends upon the format and data rate of the programming source.</i></p>
Memory Configuration	<p>Base model contains:</p> <ul style="list-style-type: none"> • 128 MB NAND Flash memory for firmware • 2 MB Boot Flash • 256 MB RAM for system and applications • 32 KB EEPROM
Processor	
Broadcom BCM7019 System on Chip with 32-bit MIPS Processor	Fast Main CPU (400 MHz / 1100 DMIPS) delivers quick tuning changes and on-screen response times

Specification	Value
Data Transmission and Tuner	
QAM 64 and 256 ITU J.83 Annex A Support	DVB-C (EN 300 429) compliant for QAM delivery and demodulation
Conditional Access and Security/Operation System/Application	
SmartCARD	ISO7816 SmartCARD reader for renewable security
Conditional Access System	<ul style="list-style-type: none"> Compliant with DVB (ETR 289) Common Scrambling Algorithm Supports 3rd-party conditional access systems such as Irdeto, MediaGuard and Nagravision
Rovi™ Copy Protection (Optional; requires a separate agreement between the cable operator and Rovi Corp.)	Allows cable service providers to add another layer of copy protection software, called Rovi, designed to restrict unauthorized subscribers from making analog copies of digital transmissions
Power Supply	
Power Supply	Internal 185 – 265 VAC 50 Hz power supply
Dimensions	
Product (WxDxH)	Approximately 415 mm x 245 mm x 45 mm (16.3 in. x 9.6 in. x 1.8 in.)

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Cisco Systems, Inc.

+1 678 277-1120 (North America, Central America, South America)

32-56-445-197 or 32-56-445-155 (Europe)

www.cisco.com

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