

# ISB7105

## HIGH-DEFINITION WIRELESS IPTV SET-TOP



Cisco® ISB7105 High-Definition Wireless IPTV Set-Top enriches the entertainment experience. Customers are now free to place their TVs and video devices almost anywhere in the home, in a way that complements their lifestyles and living environments.

Cisco ISB7105 set-tops is a versatile platform, allowing operators to deliver a wide range of content, including MPEG-2, MPEG-4 Part 10/AVC/H.264, and VC-1 video in standard-definition (SD) and high-definition (HD) formats.

Cisco ISB7105 set-top features a fast 400-MHz dual-core 32-bit host processor (up to 1100 DMIPS), with the power needed to support a variety of operating systems, advanced middleware platforms, and compelling user applications. The set-tops offer a full graphics engine with a comprehensive set of features needed for IPTV applications, including alpha blending and powerful hardware graphics acceleration. The ISB7105 set-top is capable of renewable security, with a choice of downloadable conditional access systems (CAS) and digital rights management (DRM).

**Figure 1.** Example of Cisco ISB7105 High-Definition Wireless IPTV Set-Top



### Features

- Wide range of available video codecs, including MPEG-2, MPEG-4 Part 10/AVC/H.264, and VC-1 in high-definition and standard-definition formats
- Powerful processor that supports up to 1100 DMIPS for fast user response and flexibility for multiple applications
- Renewable security support for multiple security options, with a choice of CAS and DRM providers
- Media Center Support Option that provides appropriate middleware and application support, and distributes content stored on the hard drive to other IP set-tops in the home
- External power supply
- IP compatibility using an 100BASE-T Ethernet interface for IP video and data content
- Support for leading operating systems, including Windows CE and Linux
- Middleware support for multiple options for IP middleware solutions
- Configurable memory that supports lightweight or advanced applications

- Flexible HDTV support:
  - Supports ATSC formats (including 1080p, 1080i, 720p, 480p, and 480i)
  - Supports video stretch and zoom, allowing maximum picture size on HDTV monitors
  - Downconverts video from high- to standard-definition format for recording content on analog VCRs
  - Includes some of the latest digital interfaces with applicable copy protection standards, including High-Definition Multimedia Interface (HDMI™) with High-bandwidth Digital Content Protection (HDCP)

### Front Panel Features

Table 2 lists front panel features.

**Table 1.** Cisco ISB7105 Front Panel Features

Front Panel	Description
Connections	USB host
Controls	Seven buttons: Power, Menu, OK, Forward, Back, Up, and Down
Indicators	Power, Link, HD, Record
Color	Black

### Back Panel Features

Figure 2 shows the back panel, and Table 3 lists back panel features.

**Figure 2.** Example of Cisco ISB7105 Back Panel



**Table 2.** Back Panel Features

Feature	Description
Connections	Network: 10/100 Mbps Ethernet RJ-45 connector Audio and video connectivity: <ul style="list-style-type: none"> <li>• Component YPbPr</li> <li>• Composite video RCA</li> <li>• Stereo left/right audio RCA type</li> <li>• Optical S/PDIF</li> <li>• HDMI</li> </ul>
Power Input	AC power adapter: 12 VDC

## Product Specifications

Table 3 lists specifications for the Cisco ISB7105.

**Table 3.** Product Specifications


Specification	Value
<b>Tuning and Decoding</b>	
<b>Display and playback streams</b>	One SD or one HD plus multiple PIPs (subject to middleware and application software support)
<b>Available video codecs (subject to middleware and application software support)</b>	<ul style="list-style-type: none"> <li>• MPEG-2 MP at ML, MP at HL</li> <li>• MPEG-4 Part 10/H.264 MP at L4.1, HP at L4.1</li> <li>• SMPTE VC-1 AP at L3, MP at HL</li> </ul>
<b>Available audio codecs (subject to middleware and application software support)</b>	<ul style="list-style-type: none"> <li>• MPEG-1 Layer 2 (Musicam)</li> <li>• DolbyDigital (AC-3), Dolby Digital Plus (E-AC-3)</li> <li>• MPEG-4 AAC, AAC-HE</li> <li>• MP3</li> <li>• WMA, WM9 Pro</li> </ul>
<b>Available security</b>	<ul style="list-style-type: none"> <li>• AES, DES, CSA</li> <li>• RSA support with private and public key</li> <li>• Rovi Copy Protection</li> <li>• HDCP Copy Protection</li> </ul>
<b>Wi-Fi Interface</b>	
<b>Wi-Fi</b>	<ul style="list-style-type: none"> <li>• IEEE 802.11n 5-GHz only</li> <li>• 802.1x authentication</li> <li>• WPA and WPA2 protected access</li> <li>• 64- and 128-bit WEP encryption</li> <li>• AES and TKIP encryption</li> <li>• Wi-Fi multimedia support: WMM and WMM-PS</li> <li>• Multiple SSID profiles</li> <li>• Integrated MAC address filtering</li> <li>• Modulations: OFDM/BPSK, QPSK, 16-QAM, 64-QAM</li> <li>• Supports 40Mhz channel mode in 5GHz frequency range</li> <li>• PHY rates up to 300-Mbps transmit and 600-Mbps receive</li> </ul>
<b>QoS</b>	<ul style="list-style-type: none"> <li>• IEEE 802.1p - Priority Bits</li> <li>• IEEE 802.1q - VLAN Tagging</li> <li>• 802.11e Wireless quality of service (QoS)</li> </ul>
<b>Memory and Storage</b>	
<b>DRAM</b>	256 to 512 MB
<b>Flash</b>	64 to 128 MB
<b>Boot flash</b>	4 MB
<b>Processors</b>	
<b>Powerful 32-bit host processor</b>	400-MHz, 1100-DMIPS processor can support a variety of operating systems, advanced middleware platforms, and compelling user applications
<b>Remote Control</b>	
<b>IR support</b>	Remote control multimedia (RCMM) protocol
<b>Power Supply</b>	
<b>Power supply</b>	External with power cord and plug: 12 VDC
<b>Regulatory</b>	
<b>Regulatory compliance</b>	FCC UL Part 15, UL approved
<b>Dimensions</b>	
<b>H x W x D (approximate)</b>	ISB7105: 1.85 in. x 9.85 in. x 6.62 in. (4.7 cm x 25 cm x 16.8 cm)

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## HDMI

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