



**The STMC-EC is a high performance IPTV set top media center with a full range of customer-ready internet applications designed for Over-the-Top IPTV services.**

#### **Current and Future IPTV Services**

The STMC-EC supports all of today's VC-1/WMV9 and H.264 IPTV broadcast, multicast and video on demand services and is software and hardware upgradable to meet next year's services as they evolve. Advanced buffering and scaling technology ensure excellent quality IPTV support over the public internet using bit rates from as low as 350kbps up to 20Mbps.

#### **Customer Ready Applications**

Supporting internet web browsing with the WebKit browser, YouTube video, BitTorrent file sharing, Adobe Flash Video player and Windows Media player, the STMC-EC is more than capable of providing an immersive experience combining entertainment with social networking.

#### **Windows Media Services**

Proven interoperability with Windows Media Services enables rapid deployment of an IPTV service using a Microsoft-based delivery platform.

#### **Content Protection**

The STMC-EC supports Windows® DRM, SecureMedia and Verimatrix content security systems. Embedded AES decryption enables full support for other IPTV 'virtual' conditional access systems. The integrated SmartCard system enables support for card based conditional access systems.

#### **Comprehensive User Interfacing**

Included with the STMC-EC is an Adobe Flash player and full internet browser with Java support to provide a wide range of user interface development options. Multiple high definition graphics planes and dual video decoding with picture-in-picture support ensure the STMC-EC provides the best user experience.

#### **Upgrades and Management**

All STMC products support field upgrades of operating system, applications and user interfaces. Improvements and enhancements to your service can be downloaded using the secure CompleteTV update services. Embedded remote diagnostic services allow debugging of potential quality of service issues.

#### **Add-Ons**

The STMC-EC contains two USB 2.0 interfaces enabling additional peripherals to be added, thus extending the capabilities of the system. Keyboard and hard drives enable the STMC-EC to browse the internet and record/download content locally.

#### **Features - Quick View**

- High definition codecs - H.264, WMV9, MPEG-2
- Supports all IPTV services
- YouTube, BitTorrent, internet browsing
- Supports high and low bandwidth IPTV services
- Software and SmartCard DRM/CA support
- Fully customisable browser and Adobe Flash for UI
- Extensible with USB peripherals
- Picture-in-picture and alpha blended graphics planes
- Hardware and software upgradable
- CE/FCC approved

## Applications

### Over-the-Top IPTV services

Access content from YouTube, BitTorrent, Adobe Flash Video servers and Windows Media servers. StreamWise™ advanced buffering and media management services ensure excellent quality of service for IPTV over public internet connections with minimal bandwidth requirements.

### Peer-to-Peer

Using peer-to-peer progressive download services, the STMC-EC can support pre-downloaded standard and high definition IPTV content to a USB connected hard drive.

### Open standards IPTV services

The STMC-EC can support public and private IPTV services based on the MPEG-4 H.264 codec, enabling a truly open IPTV service. High quality IPTV services using controlled bandwidth networks and H.264 codecs enable DVD quality hybrid digital services at low bandwidth.

### Internet services

Using an IR connected keyboard the STMC-EC can browse the internet and act as an email/instant messaging client.

### Dedicated Windows Media IPTV services

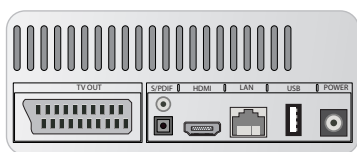
With full support for playlists, RTSP, multiple bit-rate, sub-titling, trick play, multiple audio tracks and intelligent streaming in Windows Media Services, the STMC-EC is ideal for end-to-end Windows Media based IPTV services.

### Customised services

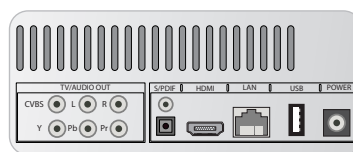
With its extensive API library, embedded Java Virtual Machine, Adobe Flash player and Fusion Toolkit software, the STMC-EC is the ideal platform for a wide variety of customised video services and applications.

## Technical Specifications

European Model



World Model



Physical connections	10/100 BaseT auto-sensing, auto-negotiation, auto MDI/MDIX RJ45 Ethernet; dual USB 2.0 one on rear, one on front; HDMI 1.3 with HDCP support; S/PDIF optical and coaxial for digital audio; component YPbPr standard and high definition output; composite CVBS output; RCA analog stereo out; dual SCART output with support for composite, RGB, S-video and stereo audio.
Video	Profiles: MPEG-2 MP@HL; H.264 Main Profile and High Profile to L.4.1; VC-1 to AP@L3, MPEG-4 ASP at Level 4; DivX 3.11, 4.11, 5.x, 6.x Max bit rate 20 Mbps. Resolutions: 480i/p, 576i/p, 720p, 1080i/p output; up and down scaling across resolutions. TV formats: PAL B/D/G/H/I/M/N, NTSC-M/J, SECAM
Audio	Profiles: MPEG-1/2 layer I, II; MP3; MPEG-2/4 AAC LC and HE; Windows Media Audio, Windows Media Pro Audio. Max bit rate 192 kbps. Features: Stereo down mix
IPTV	Broadcast, multicast, unicast, VoD, MPEG-2 TS, ISMA TS, TCP, UDP, RTP, RTSP, IGMP version 2/3, DHCP client, ICMP
Content protection	Windows DRM; SecureMedia; Verimatrix, Macrovision 7.01 copy protection; DCS; HDCP on HDMI interface; AES to 256 bits, DES/3DES/CSS/CPRM/DTCP
User interface	WebKit or ANT Galio™ (option) browser with JavaScript extensions to support media control and playback. Adobe™ Flash player 6 with ActionScript™ 2. RC5/RC6 infrared remote control; IR keyboard (option); picture in graphic; picture in picture (simultaneous SD+HD display); on screen display; standby on/off modes; full control of video placement and scaling.
Application software	Java Virtual Machine, BitTorrent™ compatible peer-to-peer download, YouTube™ playback
Service features	Windows Media multibit rate, Windows Media multi-audio streams, SAMI sub-titling
Graphics	Video plane, graphics/video plane, dedicated graphics plane, caption/sub-titling plane. 1920x1080 resolution, 32-bit ARGB.
Management	Full API control of all system parameters; embedded web user configuration; remote HTTP and TFTP upgrade
Application processor	400 MHz Dual Core CMT MIPS®/16e; Linux 2.6.12 RAM: 256 MB; Flash memory: 64 MB;
Power requirements	External PSU: 100-250v AC, 50-60 Hz, 1000mA
Environmental	Operating temperature: 0°C to 45°C. Dimensions: 200 x 200 x 58 mm (out of packaging). Weight: 1.2 kg