



# SML-5045 / 5045W

## Portable RDK-based UHD Set-Top Box with AV1 support

- High-performance Amlogic S905Y4 processor
- UHD AV1 decode
- UHD HEVC and VP9 decode
- HDR support
- Improved RDK-based performance
- HDMI 2.1 output with HDCP 2.3
- Proven security for UHD content

The SML-5045 is a compact RDK-native set-top box offering incredible performance and capable of delivering the most advanced interactive services with crystal clear and high-resolution picture directly to your customers.

Advanced Amlogic S905Y4 processor combined with Reference Design Kit capabilities delivers seemingly unlimited performance.

SML-5045 couples its processing power with the latest codecs support, employing HEVC, AV1 and VP9 to deliver stunning 4K video content at up to 60 frames per second, and offering adaptive bitrate streaming.

SML-5045 provides a cost-effective and flexible platform enabling operators to enhance their services and implement profitable service strategies.

# Technical Specification

## System Processor

CPU: AmLogic S905Y4  
Quad-core 64-bit ARM® Cortex™-A35  
GPU: ARM Mali-G31 MP2

## Memory

DDR4 4G 256Mx16 1866/2400Mbps: 1GB DDR4 (2x512MB)  
DDR4 8G 512Mx16 2400 Mbps: 2GB DDR4 (2x1GB)  
Flash eMMC: 4GB / 8GB / 16GB

## Ports

USB: 1x USB 2.0, STB power via USB during reflash  
HDMI: 2.1 HDCP 2.2/2.3, HDR (Dolby Vision, HDR10+, HDR10, HLG HDR)  
Ethernet: 1xRJ45 port, 10/100 Mbps  
Mini AV: 3.5x17 mm miniJack  
DC Jack: 5.5 x 2.1 x 10 mm  
S/PDIF (Optionally)

## Internal interfaces

Debug UART: 3.3V TTL UART 2.54 mm pin header  
Pinhole button: Update push button behind  
Mini-AV port

## Security

DRM: Widevine L1, PlayReady


## Video and audio

Video Decoding:  
AV1 MP-10@L5.1 up to 4Kx2K@60  
VP9 Profile-2 up to 4Kx2K@60fps  
HEVC: H.265 MP-10@L5.1 up to 4Kx2K@60fps;  
AVS2-P2 Profile up to 4Kx2K@60fps;  
MPEG-4 H.264 AVC HP@L5.1 up to 4Kx2K@60fps;  
MPEG-4 Part 2: ASP@L5 up to 1080p@60fps;  
WMV/VC-1 SP/MP/AP up to 1080p@60fps;  
AVS-P16 (AVS+)/AVS JiZhun Profile up to 1080p@60fps;  
MPEG-2 MP/HL up to 1080p@60fps;  
MPEG-1 MP/HL up to 1080p@60fps;  
RealVideo 8/9/10

Video resolution:  
CVBS 480i/576i standard definition output  
HDMI supports output modes up to 4Kx2Kp60  
Audio Decoding: MP3, AAC, WMA, RM, FLAC, Dolby Audio

## STB complies with the following standards

 FCC ID: 2ASFLSML5045W

 IC ID: 24800-SML5045W

Specific codecs, formats and technologies are supported subject to the purchase of additional licenses and royalty payments.

## Wi-Fi

SML-5045: Not Available  
SML-5045W: 802.11ac or ax (depending on WiFi module), 2.4GHz / 5GHz, 2T2R, 2xPCB antennas on a wire regardless a WiFi module

## BT

SML-5045: Not Available  
SML-5045W: 5.0 or 5.2 (depending on WiFi module)+  
BLE UART bitrate up to 2 Mbps

## Front Panel

LED: 1x Bicolor (red/green) LED  
IR Receiver: 38 KHz

## Remote control

SML-5045: IR  
SML-5045W: IR, BLE

## Power Adaptor

AC IN: 100-240V, 50/60Hz  
DC OUT: 12V-1.0A  
PSU Sockets: EU, US, UK, Brazil

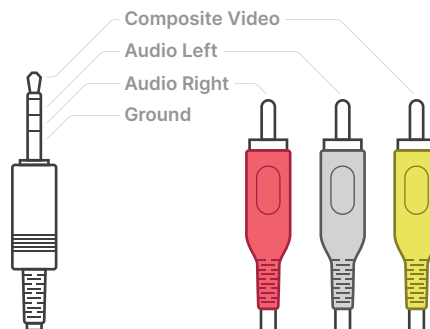
## General parameters


Weight (g): 130  
Dimensions (mm): 110.5 x 106.5 x 33

File formats: \*.mkv,\*.wmv,\*.mpg, \*.mpeg, \*.dat, \*.avi, \*.mov, \*.iso, \*.mp4, \*.rm and \*.jpg file

Image Decoding: MJPEG and JPEG unlimited pixel resolution decoding (ISO/IEC-10918)

Composite output and analog stereo audio output combined into a single 3.5x17 mm TRRS connector mini-jack:



 Complies with all applicable EC directives

 Class III of IEC Protection Classes (IEC 61140)