

Spark Technical Specifications

Automate your broadcasts and deliver a professional-quality experience every time, with our newest, feature-rich HEVC encoder (which seamlessly integrates with the BoxCast Platform).

HDMI Variant UPC: 00859492004269

SDI Variant UPC: 00859492004276

Connections

Video Input

HDMI Variant

- HDMI 2.0a

SDI Variant

- SD/HD/3G/6G/12G-SDI

Audio Input

- Balanced Stereo In, 2x 1/4" TRS, +4dBu
- Unbalanced Stereo In, 3.5mm TRS, -10dBV

HDMI Variant

- Embedded via HDMI

SDI Variant

- Embedded via SDI

Audio Output

- 3.5mm stereo headphone audio output jack

USB-C

- Power Source: 5V/3A (15W)
- Power Sink: 9V/3A, 12V/2.25A, 15V/1.8A
- USB 3.2 Gen 1

Bluetooth

- Bluetooth 5.3 for local configuration using our Broadcaster iOS app

Network

Ethernet

- 10/100/1000 Ethernet

Network

- IP address assignment via DHCP

Wi-Fi

- 802.11ac, dual band 2.4/5GHz, 2x2 MIMO
- Supports WEP and WPA/WPA2 Personal via AES/TKIP

Supported Formats

Supported Video Input Standards

- 480p 24/29.97/30/59.94/60 fps
- 576p 25/50 fps
- 576i 50 fps
- 720p 23.98/24/25/29.97/30/50/59.94/60 fps
- 1080i 48/50/59.94/60 fps
- 1080p 23.98/24/25/29.97/30/48/50/59.94/60 fps
- 2160p 23.98/24/25/29.97/30/48/50/59.94/60 (3840x2160) fps

Supported Video Streaming Standards

- 480p 24/29.97/30/59.94/60 fps
- 576p 25/50 fps
- 720p 23.98/24/25/29.97/30/48/50/59.94/60 fps
- 1080p 23.98/24/25/29.97/30/48/50/59.94/60 fps

Video Encodings

- H.264, High Profile level 4.2 (AVC)
- H.265, Main Profile (HEVC)

Supported Video Bitrate

- 150 kbps – 18 Mbps (Automatically or Manually regulated)

Supported Transport Protocols

- BoxCast Flow: Adaptive recovery, content-aware forward error correction, encryption, link quality adjustment, and TCP/UDP diversity.
- RTP over UDP

Color Resolution

- Input: 4:2:0, 4:2:2, 4:4:4
- Streaming: 4:2:0

Color Depth

- Input: 8-bit, 10-bit, 12-bit
- Streaming: 8-bit

BOXCAST

Analog Audio

Audio Control

- Adjustable analog input gain

Audio Encoding

- AAC-LC

Audio Sampling

- 48 kHz, 24-bit

Monitoring

Video Monitoring

- Live video preview on device screen

Status Indication

- Customizable RGB light ring with selectable branded colors

Streaming

Streaming Destinations from the BoxCast Platform

- BoxCast Platform, including native players for web, mobile, AppleTV, Amazon Fire TV, and Roku
- Facebook Live
- YouTube
- X (Twitter)
- Any RTMP Destination

Physical

Physical Dimensions

- 129.5 x 92 x 33 mm

Product Weight

- 11.0 oz

Shipping Weight

- 2 lbs 10.4 oz

Mounting

- Clip-on stand, clip-on wall mount with 1/4"-20 tripod mount and 75x75mm VESA compatibility

Other

Remote Control and Automation

- BoxCast online Dashboard, automated start/stop scheduling
- BoxCast Broadcaster app for iOS
- API available for BoxCast's cloud platform

Local Recording

- Class I microSD card, minimum 16GB capacity, ext4 format

Maximum Audio Bitrate

- 320 kbps

Gain Range

- Adjustable analog input gain, 47.5 dB

**The balanced and unbalanced inputs cannot be used simultaneously*

Audio Monitoring

- On screen levels for each input channel and the stereo output to the broadcast
- Preview audio via headphone output

Simulcasting

- Capable of streaming to multiple destinations exclusively through BoxCast's live video streaming platform.

Display

- 4.3" capacitive touch display, 800x480, 50% NTSC, high brightness

Operating Conditions

- 0°C to 40 °C
- 0 to 90% RH, non-condensing

Power

- Barrel jack input, 12V DC nominal, 2.1 mm x 5.5mm, center-positive
- Also can be powered by a compatible USB-C source
- Power consumption 12W typical, 18W maximum

What's in the Box

- Spark Encoder
- 12V power adapter
- Clip-on stand accessory
- Clip-on wall-mount accessory
- Hardware kit for optional wall mounting or attachment to 75x75mm VESA mount

