# MAGEWELL

# USB Capture SDI Plus Technical Specifications

Specifications are based on current hardware, firmware and software revisions, and are subject to change without notice.

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Revised on 22/12/2023

## Input Features

- Max input & loop through video: 2048x1080 60fps 4:2:2 10-bit
- Input RGB/YUV 4:4:4 10/12-bit, YUV 4:2:2 8/10/12-bit, RGBA/YUVA 4:4:4:4 10-bit
- Up to 8-channel embedded audio
- Input analog audio via 3.5mm line in
- SD/HD/3G-SDI BNC input & loop through
- SD (ST 259)/HD (ST 292)/3Ga (ST 425)/3Gb-DL (ST 425)/3Gb-DS (ST 425) standard
- Input SDI signals transmitted up to 150m for 3G-SDI signals

## Process and Capture Features

- Video processing pipelines with ~160M pixels/s processing bandwidth
- Capture videos up to 2048x1080, frame rates up to 120fps. Outputs include (actual capture frame rate can be limited by the USB bandwidth and internal working frequency.):
  - 1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60
  - 720x576p25
  - 720x480p30
- Output YUYV/UYVY/RGB24/RGB32 videos
- Support video cropping, up/down scaling, de-interlacing, aspect ratio conversion, color format conversion, frame rate conversion, flip and mirror
- Output audio of SDI signal via 3.5 mm interface
- Up to 2 audio channels at 48KHz

## Included Software

- USB Capture Utility enables users to easily check and set the capture-related parameters, upgrade firmware of the capture device and export info needed for troubleshooting

## SDK & APIs

- The MWCapture SDK provides functions including signal status extraction, capture configuration and real-time audio & video capture, etc
- Windows DirectShow/Wave API/DirectSound/WASAPI
- Linux V4L2/ALSA
- macOS AVCaptureSession/AudioUnit

## Output Interface

- USB 3.0
  - compatible with USB 2.0
  - compatible with USB 3.1 Gen 1

## Compatible Software

- Zoom Rooms
- Microsoft Teams
- Skype for Business
- Google Hangouts
- GoToMeeting
- Gstreamer

- VLC
- OBS Studio
- XSplit
- QuickTime Player
- Any other DirectShow/V4L2/AVCaptureSession based encoding or streaming software

## Recommended OS

- Windows 7/8/8.1/10/11/Server 2008/Server 2008 R2/Server 2012/Server 2016 (x86 & x64) and above
- Linux x86, x64 & ARM architecture, with 2.6.35 and above
- Mac OS X 10.9/macOS 10.12 and above
- Chrome OS

## LED Indicator

- Status LEDs indicate the working state of the device:
    - Pulsing slowly: input signal unlocked
    - On: input signal locked
    - Double blinks: memory abnormal or FPGA configuration failed
    - Off: firmware or power supply abnormal

## Form Factor

- 4.36 inch (L) x 2.24 inch (W) x 0.67 inch (H) (110.7mm x 56.8mm x 17mm)

## Accessories

- 1 × USB 3.0 cable (63cm)

## Power Consumption

- 5V max current: ~0.5 A
- Max power consumption: ~2.5 W

## Working Environment

- Operating temperature: 0 to 45 deg C
- Storage temperature: -20 to 70 deg C
- Relative Humidity: 5% to 90% non-condensing