

# MAGEWELL

## Pro Convert 12G SDI 4K Plus Technical Specifications

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### Input & Loop through Features

- Max video input & loop through: 4096x2160 60fps. Supported resolutions include:
  - 4096x2160p/3840x2160p/2048x1080p/1920x1080p 23.98/24/25/29.97/30/47.95/48/50/59.94/60
  - 2048x1080i/1920x1080i 25/29.97/30/47.95/48/50/59.94/60
  - 1280x720p 50/59.94/60
  - 720x576 25p/50i (PAL SD)
  - 720x480 29.97p/59.94i (NTSC SD)
- Support RGB/RGBA/YUV/YUVA signals with 10/12-bit color depth
- Support RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 color sampling
- Support RGB, YUV BT.601/709/2020 video input
- 16-channel SDI embedded audio inputs
- SD/HD/3G/6G/12G-SDI BNC input & loop through
- Support SD (ST 259)/HD (ST 292)/3Ga (ST 425)/3Gb (ST 425)/3Gb-DL (ST 425)/3Gb-DS (ST 425)/6G (ST 2081)/12G (ST 2082) SDI standards
- Receive 12G-SDI transmitted up to 30m (98ft), 6G-SDI 80m (262ft)

### NDI<sup>®</sup> Encoding Features

- Encoding Full NDI real-time stream at up to 4096x2160 60fps 4:2:2 8-bit
- Output the same resolution as input or any custom resolution. Typical outputs include:
  - 4096x2160p/3840x2160p/2048x1080p/1920x1080p 23.98/24/25/29.97/30/47.95/48/50/59.94/60
  - 2048x1080i/1920x1080i 25/29.97/30/47.95/48/50/59.94/60
  - 1280x720p 50/59.94/60
- Output frame rate same as the original, 1/2, 1/3 or 1/4 of input frame rate
- Encoding 16-channel NDI-embedded audio
- Support NDI 4.x

### Web UI Management

- Provide comprehensive information regarding the device and signals in real-time
- Allow to configure how an input is processed and encoded, including deinterlacing, up/down scaling, frame rate, aspect ratio, as well as the network connection
- Update firmware
- Support USB RNDIS/ECM
- Support IE/Edge/Firefox/Chrome/Safari/Opera web browsers
- Provide HTTP APIs

### On-board Control Buttons

- 16 Position Rotary DIP Switch: set board-index from 0 to F

### PTZ Control

- Control PTZ cameras using protocols of VISCA, Visca UDP, Visca UDP2rs232, PELCO-P and PELCO-D via NDI
- Mini-DIN–8 jack (shared with Tally light)

### Network Interfaces

- 10/100/1000Mbps Ethernet
- IEEE 802.3af PoE

## USB Interface

- USB2.0 Type B
  - 5V/2.1A power supply
  - USB RNDIS/ECM

## Supported Products

- NDI Studio Monitor
- OBS
- vMix
- Any other NDI-enabled product

## LED Indicators

- Status LEDs indicate:
  - Power supply: on/off
  - Tally: preview/program
  - Input signal: locked/unlocked
  - Loop through signal: on/off

## Form Factor

- 117.5mm (L) x 66.7mm (W) x 23.4mm (H)

## Accessories

- USB 2.0 A to B cable
- 5V/2.1A power adaptor
- Mini-DIN 8 breakout cable
- Tally light
- L-bracket

## Screw Mounting Hole

- ¼–20 threaded hole

## Power Consumption

- 5V max current: ~1.65A
- Max power consumption: ~8.5W

## Working Environment

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