

Appendix A – Specifications

12GM Tech Specs

Video Formats

- (4K) 4096 x 2160p
- (UltraHD) 3840 x 2160p
- (2K) 2048x1080p
- (HD) 1920x1080p
- (HD) 1920x1080i
- (HD) 1280x720p
- (SD) 720x576i
- (SD) 720x480i

Video Input/Output Digital

- 4 x 12G-SDI BNC, SMPTE 259/292/424/2081/2082
- YCbCr 4:2:2
- 8 or 10-bit
- Two Sample Interleave (2SI) or Square Division (Quadrant) input and output mapping

1 x 12 Gb SDI

4 x 3 Gb SDI (Level A)

- (4K) 4096 x 2160p 50, 59.94, 60
- (UltraHD) 3840 x 2160p 50, 59.94, 60

1 x 6 Gb SDI

4 x 1.5 Gb SDI

- (4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30
- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30

1 x 3 Gb SDI (Level A)

- (2K) 2048 x 1080p 50, 59.94, 60
- (HD) 1920 x 1080p 50, 59.94, 60

1 x 1.5 Gb SDI

- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30
- (2K) 2048 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080PsF 23.98, 24, 25, 29.97, 30
- (HD) 1920 x 1080i 25, 29.97, 30
- (HD) 1280 x 720p 50, 59.94, 60

1 x 270 Mb SDI

- (SD) 625i 25
- (SD) 525i 29.97

Supported Conversions and Functions

- Quad 3G-SDI to Single 12G-SDI
- Single 12G-SDI to Quad 3G-SDI

- Quad 1.5G-SDI to Single 6G-SDI
- Single 6G-SDI to Quad 1.5G-SDI
- Two Sample Interleave (2SI) to Square Division (Quadrant) pixel mapping
- Square Division (Quadrant) to Two Sample Interleave (2SI) pixel mapping
- Pass through of Single Link 3G, 1.5G and 270M SDI video
- Distribution Amplifier support (1x4)
- Input signal diagnostics
- Input timing analyzer for quad-link signals

Cable Equalization (Belden 1694A coax)

- 12 Gbps, 70m
- 6 Gbps, 100m
- 3 Gbps, 140m
- 1.5 Gbps, 200m
- 270 Mbps, 300m

Audio Input/Output Digital

- Passes SDI embedded audio, 24-bit, up to 16-Channels

User Interface

- USB port used with supplied cable and Mini-Config software application to configure device and access diagnostics via macOS or Windows.

Size (w x d x h)

- 5.76" x 4.02" x 0.90" (146mm x 102mm x 23mm)

Weight

- 0.6 lb (0.3 kg)

Power

- 5-20VDC regulated, 12 watts, power supply required, included with purchase
- AC Adapter: 100-240VAC, 50/60 Hz, universal input

Environment

- Safe Operating Temperature: 0 to 40 degrees C (32 to 104 degrees F)*
- Safe Storage Temperature (Power OFF): -40 to 60 degrees C (-40 to 140 degrees F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)

*NOTE: *12GM uses approximately 12 watts of power and convection cooling. It will be very warm to the touch, which is normal. When installing the unit, mount in a location where it has access to air for proper cooling. Do not stack the 12GM with other Mini-Converters.*