

# Specifications

## 3G-AE 100

### Video

Signal Types.....	SDI, HD-SDI, and 3G-SDI digital video
Gain.....	Unity
Resolution.....	8 or 10 bits, automatic
Operation standards.....	SMPTE-259M, SMPTE-292M, SMPTE-424M, SMPTE-272M, SMPTE-299M ITU-RBT.601, ITU-RBT.1120
Auto data rate lock.....	Yes

### Video input

Number/signal type.....	1 single link SDI, HD-SDI, or 3G-SDI digital component video
Connectors.....	1 female BNC
Nominal levels.....	0.8 Vp-p
Minimum/maximum levels.....	0.5 Vp-p to 1 Vp-p with no offset
Impedance.....	75 ohms
Return loss.....	<-15 dB @ 5 MHz to 2.97 GHz <-10 dB @ 1.5 GHz to 2.97 GHz
DC offset (max allowable).....	5 V
Input coupling.....	AC
Equalization.....	Automatic for up to -30 dB of cable loss

**NOTE:** Transmission distance will vary depending on the signal resolution and on the type of cable, source, and display used in the system.

### Video output

Number/signal type.....	1 single link SDI, HD-SDI, or 3G-SDI digital component video
Connectors.....	1 female BNC
Re-clocking.....	Automatic for 270 Mbps, 1.485 Gbps, and 2.97 Gbps (bypassed for all other rates)
Nominal level.....	0.8 Vp-p
Minimum/maximum levels.....	0.5 Vp-p to 1 Vp-p
Impedance.....	75 ohms
Return loss.....	<-25 dB @ 100 MHz
DC offset.....	+/-5 mV with input at 0 offset

### Audio

Frequency response.....	20 Hz to 20 kHz, $\pm 0.2$ dB
THD + Noise.....	0.05% @ 1 kHz at nominal level, 0 dB gain
S/N.....	>100 dB at maximum output (unweighted)

### Audio input

Number/signal type.....	1 SDI embedded audio (SMPTE 272M, SMPTE 299M)
Connector.....	1 female BNC connector

### Audio output

Number/signal type.....	(4) stereo balanced/unbalanced
Connector.....	(4) 5-pole, 3.5mm captive screw connector

Impedance ..... 50 ohms unbalanced, 100 ohms balanced

## General

Power ..... External  
Input: 100-240 VAC, 50/60 Hz  
Output: 12 VDC, 1.0 A, 12 watts

Power consumption ..... 5.8 watts

Temperature/humidity ..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing  
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing

Cooling ..... Convection, unvented

Rack mount ..... Yes

Enclosure type ..... Metal

Enclosure dimensions ..... 1.7" H x 4.3" W x 3.0" D (1/4 rack width)  
4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)

Product weight ..... 0.5 lbs (0.3 kg)

Shipping weight ..... 3 lbs (2 kg)

Vibration ..... ISTA 1A in carton (International Safe Transit Association)

Listings ..... UL, c-UL

Compliances ..... CE, FCC Class A, VCCI, AS/NZS, ICES

MTBF ..... 30,000 hours

Warranty ..... 3 years parts and labor

**NOTE:** All nominal levels are at  $\pm 10\%$ .

**NOTE:** Specifications are subject to change without notice.

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PRELIMINARY