

# Atlona AT-3GSDI500 3G/HD/SD-SDI PATTERN GENERATOR SUPPORTS UP TO 1080p

## ATLONA 3G/HD/SD-SDI PATTERN GENERATOR SUPPORTS UP TO 1080p

### MODEL: AT-3GSDI500

Atlona Technologies AT-3GSDI500 3G/HD/SD-SDI Pattern Generator is an advanced SDI pattern generator with multi-format (3G/HD/SD) and multi-pattern support. Besides still and moving video test patterns, other features such as audio (SMPTE-291M) are also provided. The AT-3GSDI500 can support up to 8 channel AES compliant audio with 48KHz sample rate. Another attractive feature of AT-3GSDI500 comes from bypassing the HDMI input and allowing users more testing patterns for connected displays, or treats the AT-3GSDI500 as an advanced HDMI to SDI converter with 3G capability. With portable size, the AT-3GSDI500 is equipped with four buttons and a LCM screen to ease the control. This device provides a cost effective way to calibrate and test SDI enabled video devices and displays.

### Features:

- Supported output video resolution:
  - SD-SDI: NTSC 525 @60Hz, PAL 625 @50Hz
  - HD-SDI: 720p @50Hz, 59.94Hz, 60Hz
  - 1080i @50Hz, 59.94Hz, 60Hz
  - 1080p @23.98Hz, 24Hz, 25Hz, 29.97Hz, 30Hz
  - 3G-SDI: 1080p@50Hz, 59.94Hz, 60Hz
- Supported output audio format: SMPTE 291M, SMPTE 299M (8 channel audio, audio group can be adjusted)
- Bit rate
  - SD-SDI: 270Mbps
  - HD-SDI: 1.485Gbps, 1.4835Gbps
  - 3G-SDI: 2.97Gbps, 2.967Gbps
- Video Patterns
  - 100% Color Bars, Borderline, Random Noise, Check Field, Black, Vertical Lines, Black / White alternate fields, Full Grey / Full White, Black to White Gradient, Random Generator for all still patterns, moving squares White noise, Inverse effect with still pattern, Scrolling Title (see Appendix for illustrations)
- Supports HDMI bypass mode
- Save settings to memory option
- ANC data: EDH (RP-165), SMPTE 352M, SMPTE291M
- Control: By LCM & Panel Buttons
- Video output: Dual 3G capable SDI output

### Technical Specifications:

- SDI standards: 3G/HD/SD-SDI
- Auto SDI rate detection: Yes
- Supported protocols:
  - SMPTE 259M (270Mbps / 360Mbps)
  - SMPTE 292M / HDTV (1.485 & 1.485/1.001Gbps)
  - SMPTE 424M / 425M (2.97 & 2.97/1.001Gbps)
- Video bandwidth: 2.97Gbps
- Data rates: 143 / 270 / 1483 / 1485 / 2967 / 2970 Mbps
- Video support:
  - [3G] 1080p@50/59.94/60 (4:2:2)
  - [HD] 720p50/59.94/60, 1080p24/30, 1080i50/59.94/60
  - [SD] NTSC@59.94Hz, PAL@50Hz
- SDI signal type: SMPTE-292M / 259M / 424M
- Pathological pattern (RP-198): Immune
- HDMI bypass: Yes
- Output impedance: 75 Ohms
- Cable (Belden 1694A) equalization / transmission:
  - 3G-SDI: up to 60m (190ft)
  - HD-SDI: up to 150m (500ft)
  - SD-SDI: up to 300m (1000ft)
- Audio support: Yes
- PCB Stack-up: 4-layer board [impedance control — differential 100 Ohm; single 50 Ohm]
- Input: None
- Output: 2x BNC [SDI]
- BNC connector: 75 Ohm interlocking socket
- HDMI connector: Type A [19-pin female]
- [HD] Eye pattern characteristics:

- Amplitude: Within 800mV <10%  
Rise overshoot: Less than 2%  
Fall overshoot: Less than 2%  
Long time jitter <1.0μ  
Timing jitter <1.0μ  
Alignment jitter <0.2μ
- Housing: Metal Enclosure
- Dimensions (LxWxH): 5.9" x 7.5" x 1.3"
- Weight: 1.5 lbs
- Power Supply: 5V 4A DC

**Package Includes:**

- AT-3GSDI500
- 5V power supply unit
- User's manual