



# HDMI 2.0/12G-SDI Signal Generator

500830-V2



## Overview

The HDMI 2.0/12G-SDI Signal Generator (model: 500830-V2) is a portable test tool that can generate HD/3G/12G SDI and HDMI 2.0 test patterns in a full range of resolutions up to 4K@60Hz (4:4:4). The unit assists users in validating the capabilities and proper operation of their sink devices. The user may select from various test pattern, resolutions, refresh rates, color spaces and other related parameters. When used with the 500831 Signal Analyzer, a useful set of cable connectivity/quality tests, and device compatibility tests can be performed to help identify problems. The device is an exceptional tool at an attractive price for any AV engineer/developer, Integrator and installer.

The Signal Generator is a portable device which can be used anytime you need it and anywhere, making it an invaluable tool. The unit supports an internal rechargeable Lithium-ion battery, allowing the device to be operated autonomously for up to 5 hours per charge.

## Applications

- Broadcast studios
- Television studios
- IT departments
- Datacentres
- AV testing environments

## Key Features

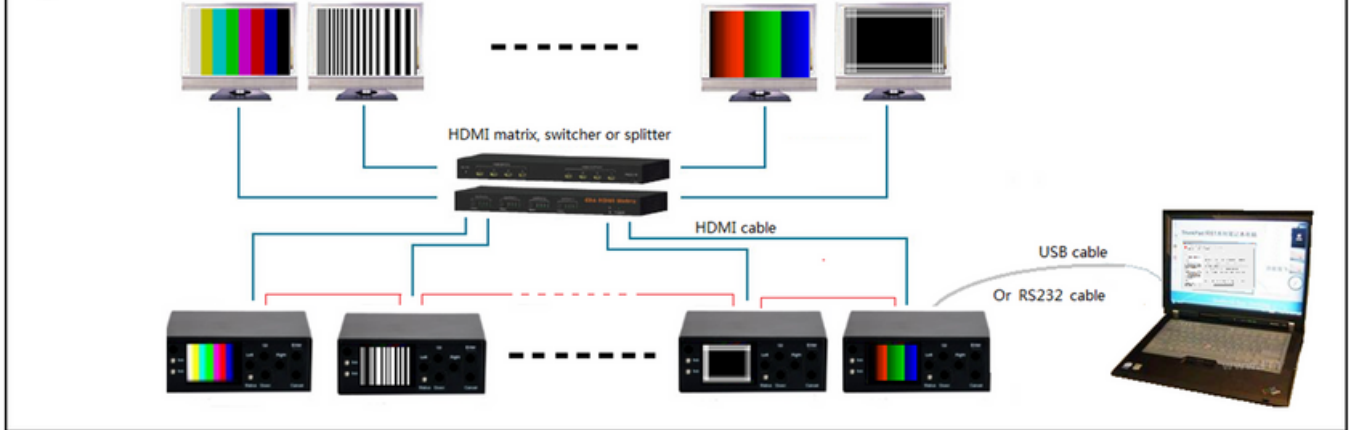
- Supports HDMI up to 4K/60 & 3D, and 12G-SDI
- Supports RGB4:4:4, YUV4:4:4, YUV4:2:2, YUV4:2:0 & Deep Color
- Supports 37 preset patterns & 43 preset resolutions
- 3" LCD panel for pattern preview & menu settings
- Supports up to 7 audio channels
- Supports HDCP on/off, for testing HDCP 1.4 & 2.3
- Supports EDID management
- Locally or remotely managed via RS232 or USB
- Free Windows management software

## Specification

<b>Environment</b>	HDMI 2.0 and 12G-SDI
<b>Devices</b>	Testing projectors, monitors, and TV displays. Plus cable infrastructure when paired with 500831.
<b>HDMI Signal Support</b>	Up to HDMI 2.0/DVI
<b>SDI Signal Support</b>	HD-SDI, 3G-SDI and 12G-SDI
<b>HDCP Support &amp; Control</b>	Supports HDCP 1.4 and 2.3, with Enable/Disable control
<b>Video Bandwidth</b>	Up to 18.0GHz (6.0GHz per channel)
<b>Color Depth</b>	24bits, 30bits, 36bits and 48bits
<b>Color Space</b>	RGB444, YUV444, YUV422, YUV420 (HDMI 2.0 only)
<b>Resolution/Refresh Rate Presets</b>	43 preset resolutions: VESA, 480p, 720p, 1080i, 1080p, 2160p, 4K, 720P-3D, 1080P-3D, ... Auto modes: one auto mode
<b>User Defined Resolutions/Refresh Rates</b>	10 configurable presets
<b>Supported Patterns</b>	37 preset patterns (36 2D pattern and one 3D pattern)
<b>Audio Bit Depth</b>	16bit, 20bit and 24bit
<b>Audio Sample Rate</b>	32KHz, 44KHz, 48KHz, 88KHz, 96KHz, 176KHz and 192KHz
<b>Vertical Frequency Range</b>	≤ 60Hz
<b>Connectors</b>	<ul style="list-style-type: none"> <li>One (1) HDMI connector for HDMI video-out</li> <li>One (1) SDI (BNC) connector for SDI video-out</li> <li>One (1) 3.5mm connector for analog audio-in</li> <li>One (1) RS232 DB9 connector for management</li> <li>One (1) RS232 DB9 Connector for cascading management port</li> <li>One (1) USB connector for management</li> <li>One (1) 2.1mm barrel jack power connector</li> </ul>
<b>Power Source</b>	<ul style="list-style-type: none"> <li>One (1) 110/240VAC to 12VDC @ 3A power supply, with interchangeable blades for US, UK and EU.</li> <li>One (1) built-in (non-serviceable) rechargeable Lithium-ion battery supporting up to 5 hours of usage per charge.</li> </ul> (Unit supports a power switch on rear. Battery charge duration may vary.)
<b>Power Consumption</b>	11W
<b>Temperature</b>	Operating: 0° to 40°C    Storage: -20° to 85°C Humidity: Up to 95% non-condensing
<b>Enclosure</b>	Metal
<b>Dimensions</b>	6.69 x 1.97" x 4.29" (170mm x 50mm x 109mm), not including connectors
<b>Weight</b>	2.80lbs (1.27kg), shipping weight
<b>Compliance</b>	Regulatory: FCC, CE, RoHS      Flammability: 94V0
<b>Warranty</b>	2 years
<b>Order Information</b>	500830-V2 HDMI 2.0/12G-SDI Signal Generator (UPC: 627699018309)
<b>Companion Product</b>	500831 HDMI 2.0/3G-SDI Signal Analyzer (sold separately)

# Typical Application

## Signal Generator Alone:



## Signal Generator & Analyzer Combo:

