MU-STIX-G

STIX Test Ecosystem Signal Generator

The MU-STIX-G is a revolutionary Murideo thumb drive-sized 8K HDMI pattern generator supporting HDMI 2.1 FRL signals up to 48 Gbps and legacy HDMI 2.0 TMDS signals up to 18 Gbps. The MU-STIX-G is ideal for rack room assembly testing or light-duty in-field pass/fail signal transmission verification. 13 different test patterns can be generated at resolution timings from 720p/60 fps up to 8K/30 fps, including 4K/120 fps.

Initially developed as a resource for AVPro Edge internal quality control, the STIX MU-STIX-G generator and MU-STIX-A analyzer Ecosystem were conceived to perform asymmetric testing methodology for dynamically transmitting, receiving, and logging test sources through 1,152 MXnet endpoint transmitters and receivers. Imagine pursuing this process with hundreds of Blu-ray machines or streaming devices and a staggering number of video displays... it is simply impossible. Having multiple pairs of the STIX duo on hand makes tedious, labor-intensive pre-deployment rack room testing easy and fast.

The MU-STIX-G's mini OLED screen display shows the current outgoing video signal, including a thumbnail of the active test pattern, resolution and timing, bit depth, chroma, and HDCP Version. Powered by any standard USB power port, the MU-STIX-G can operate on the go around an installation site connected to a phone or tablet using a USB Type-C to Type-C cable. Its ultra-compact, stow-away form factor enables all field technicians to have cost-effective HDMI pattern generation available for versatile HDMI signal path verification for legacy HDMI system troubleshooting or new HDMI 2.1 installations.
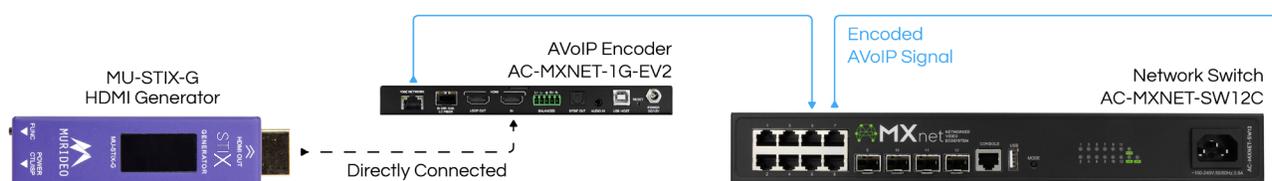
FEATURES:

- HDMI 2.1b, 8K 48 Gbps (FRL) Compliant
- Generates 720p, 1080p, 4K/60 & 4K/120 fps, and 8K/30 fps Signal Timings
- 8-, 10-, and 12-bit Color Depths, in RGB, 4:2:0, 4:2:2, and 4:4:4 Color Spaces
- Selectable HDCP: Off, 1.4, and 2.3 (1.4 is TDMS only)
- Generates 13 Test Patterns, Including a Pseudo Random Binary Sequence, a Diagnostic Tool for Identifying Transmission-related Issues Such as Bit Errors, Signal Attenuation, and Timing Problems.
- Independently Powered
- Compatible with All HDMI Devices

System Testing
MU-STIX-G Application Diagram

Signal Path ▶ - - ▶
Ethernet ▶————▶

MU-STIX-G
HDMI Generator

AVoIP Encoder
AC-MXNET-1G-EV2

Encoded
AVoIP Signal

Network Switch
AC-MXNET-SW12C

Directly Connected

MURIDEO®

PRODUCT SPECIFICATIONS:

VIDEO	
HDMI Version	HDMI 2.1
HDCP Version	HDCP 2.3 and 1.4
HDCP ON/OFF	Yes
Resolution Timings	720p, 1080p, 4K/60 fps 4K/120 fps, 8K/30 fps
Video Encoding	RGB (Limited), YCbCr
Video Sampling Models	RGB 4:4:4, YUV 4:4:4, YUV 4:2:2
Color Bit Depth	8-, 10-, 12-bit
Test Patterns	Black, Checkbox, Stripes, Red, Green, Blue, White, White Ramp, Red Ramp, Green Ramp, Blue Ramp, PRBS, Color Bars
AUDIO	
Audio Output	Not Supported
PORTS	
HDMI	Male Type-A
Power, Control and Firmware	USB Type-C
ENVIRONMENTAL	
Operating Temperature	23 to 125°F (-5 to 51°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Humidity Range	5-90% RH (No Condensation)
Cooling	Passive
POWER	
Max Power Consumption	1.35 W
Power	5 VDC, 270 mA
DIMENSIONS	
Dimensions (Single Unit Only - Height/Depth/Width)	mm: 12 x 21 x 81.1 inch: 0.47 x 0.82 x 3.2
Dimensions (Packaged Width/Depth/Height)	mm: 122 x 91 x 26 inch: 4.80 x 3.58 x 1.02
Weight (Unit)	27 grams / 1 oz
Weight (Packaged)	136 grams / 4.8 oz
WARRANTY	
Product Warranty	2 Years

BENEFITS:

LOW-COST, FLEXIBLE OUTPUT SOURCE: Match pattern generation with standard output timings used by HDMI-based entertainment sources at a low cost and with flexible configuration. Toggle through settings instead of switching sources.

AVAILABLE SIGNAL TIMINGS: 720p and 1080p, 4K/60 and 120 fps, and 8K/30 fps

SELECTABLE COLOR DEPTH: 8-, 10-, and 12-bit color depth

SELECTABLE COLOR SPACE: RGB, 4:2:0, 4:2:2, and 4:4:4 color space options are available

ULTRA-COMPACT FORM FACTOR: The HDMI headshell-sized footprint enables easy connectivity in tight spaces after racks are built. It can also be conveniently stored with tools or in a computer bag for any time troubleshooting.

INTEGRAL COMPONENT OF THE STIX ECOSYSTEM: The STIX Ecosystem allows for asymmetrical scalability for MU-STIX-G deployment in end-to-end testing scenarios. Paired with the MU-STIX-A analyzer, system troubleshooting, and infrastructure performance confirmation can be easily accomplished before sources and displays are installed.