

The 7851TG2-3G is a dual multi-format Test Generator. It provides a cost-effective method of generating 3Gb/s, 1.5Gb/s HD-SDI and 270Mb/s SD-SDI test signals. The 7851TG2-3G is ideal for checking signal path integrity, or to determine system performance over varying cable lengths. The 7851TG2-3G generates test signals in a wide variety of SMPTE ST 424, SMPTE ST 292-1 and SMPTE ST 259 video formats. These formats include SMPTE ST 274 (1920x1080), SMPTE ST 296 (720p), SMPTE ST 372 (Dual Link HD), and SMPTE ST 425-1 level A and level B. This also includes 4:2:2/4:4:4 sample structure, YCbCr and RGB color space and definitions for 10/12 bit depths.

An included linear mixer can be used to key full frame overlays or specialized video elements. User supplied full frame bitmaps and stereo wave files can be played out for trouble slides, link identification or specialized test signals. Stereoscopic 3D video test signals are included.

The dual on-board test signal generators can be independently controlled providing test signals for two purposes simultaneously.

Test Generator #1 (TG1) has four outputs and can generate:

Four outputs of the same 3G, HD, or SD-SDI test pattern OR
Two outputs of the same Dual Link HD-SDI (SMPTE ST 372) test pattern

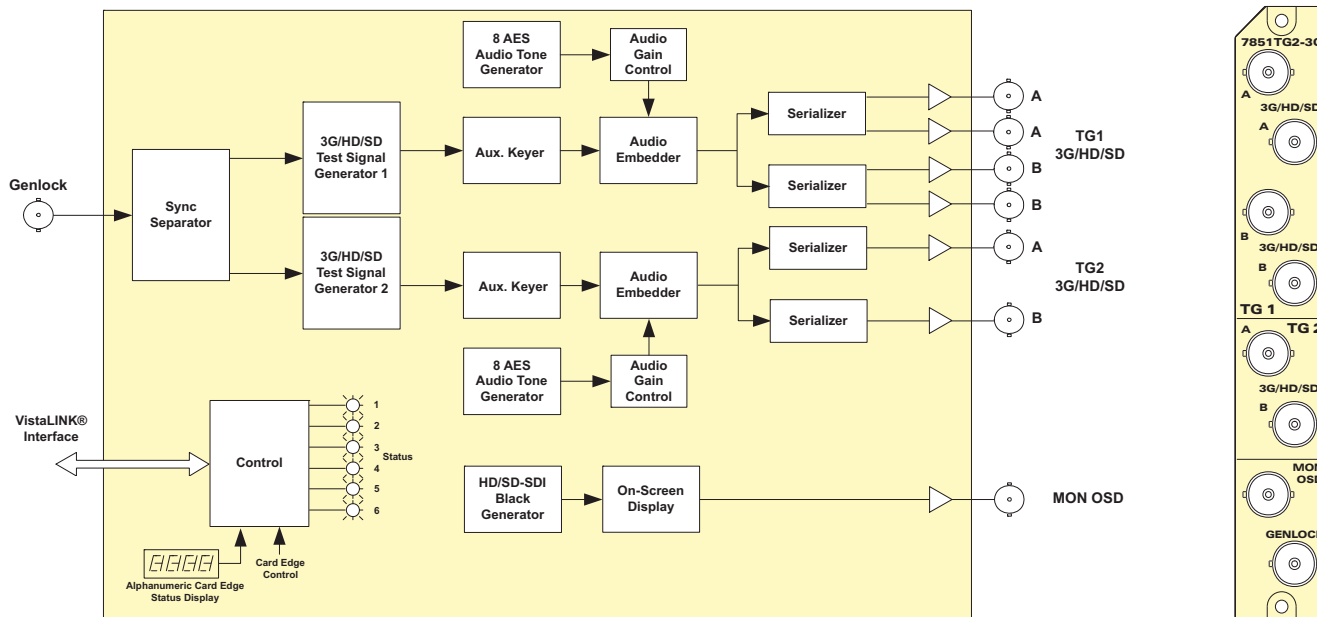
Test Generator #2 (TG2) has two outputs and can generate:

Two outputs of the same 3G, HD, or SD-SDI test pattern OR
One output of the same Dual Link HD-SDI (SMPTE ST 372) test pattern

The 7851TG2-3G can be configured via dedicated on-screen menu and is also VistaLINK® capable, offering remote monitoring, control and configuration capabilities via Simple Network Management Protocol (SNMP) giving the flexibility to manage operations, including signal monitoring and module configuration from SNMP capable control systems (Manager or NMS).

► Features & Benefits

- Two Independent Test Signal Generators (common frame rate)
- Wide variety of image formats including 1080p, 1080i, 2048p, 2048i and 720p video formats
- Support for a wide variety of frame rates (23.98, 24, 25, 29.97, 30, 50, 59.94, 60 fps)
- Stereoscopic 3D test signal generation in a number of formats (Dual Stream, Side-by-side, T/B, E/O)
- Selectable genlock input format - bi-level or tri-level sync
- 3Gb/s full field test signals
- Dual and single link 1.5Gb/s test signals
- SD 270Mb/s test signals
- Audio test tone generation
- Payload ID inserter required for all SMPTE ST 425-1 and SMPTE ST 372 signals
- Linear keyer to allow full frame overlays and specialized video items (sweep and beeps, etc.)
- User supplied full frame bitmap (.BMP) support.
- User supplied stereo audio wave file (.WAV) support.
- Dedicated monitoring output for on screen display configuration
- Card edge status LEDs
- VistaLINK® - capable offering remote control and configuration capabilities via SNMP



► Specifications

Genlock Input:

Type: Menu selectable - depends on output video format
HD Tri-level Sync
NTSC or PAL Color Black
Composite Bi-level sync (525i or 625i)
286/300 mV

Connector: BNC's per IEC 61169-8 Annex A
Termination: 75Ω (jumper selectable)

Serial Video Outputs:

Standard:
3G: SMPTE ST 425-1 Level A and B
HD-SDI: SMPTE ST 292-1, 4:2:2 YCbCr (single link)
SMPTE ST 372 (dual link)
SD-SDI: SMPTE ST 259-C

Generators:

TSG 1: 4 Outputs
TSG 2: 2 Outputs
Embedded Audio: Up to 4 groups of audio (4 channels in one audio group) as specified in SMPTE ST 299-1 Selectable tone frequencies (from 60Hz to 10kHz) and audio level control.
Connectors: 6BNC's per IEC 61169-8 Annex A
Signal Level: 800mV nominal
V Phasing: Infinite lines
H Phasing: Infinite samples
DC Offset: 0V ±0.5V
Rise & Fall Time: 200ps nominal
Overshoot: <10% of amplitude
Wide Band Jitter: < 0.2 UI HD
< 0.3 UI 3G

Electrical:

Voltage: +12V DC
Power: 15W
EMI/RFI: Complies with FCC Part 15, Class A
EU EMC Directive

Physical (number of slots):

7800FR 1
7800FR-QT 1
7801FR 1

7851TG2-3G

3G/HD/SD-SDI Advanced Dual Test Signal Generator

Ordering Information

7851TG2-3G 3G/HD/SD-SDI Advanced Dual Test Signal Generator

Ordering Options Rear Plate must be specified at time of order
(Eg: Model +3RU)

Rear Plate Suffix
+3RU 3RU Rear Plate for use with 7800FR, 7800FR-QT or 7801FR
Multiframe

Enclosures

7800FR

7800FR-QT

7801FR

3RU Multiframe which holds up to 15 single slot modules

3RU Multiframe which holds up to 15 single slot modules

1RU Multiframe which holds up to 4 single or 2 dual slot modules

The Complete Solution Provider

