

# SASI 240 DUAL-CHANNEL VIRTUAL INSTRUMENT

### FULLY SYNTHETIC, 2-CHANNEL MULTI-PURPOSE MEASUREMENT DEVICE

Textron Systems' SASI 240 is a Signal Analysis Synthetic Instrument that combines the capabilities of three distinct measurement systems into a single device. The dual-channel architecture enables two independent RF measurements to be run simultaneously. Whether used as a benchtop device or an integrated ATE RF sub-system, SASI's simple and intuitive graphic user interface ensures easy, out-of-the box functionality. SASI hardware is built around a modular, scalable architecture and is paired with long-term product support. This truly is automation made easy.

- Dual Channel Measurements
- 2 DC-coupled inputs with a frequency range of DC to 20 MHz
- 2 AC-coupled inputs with a frequency range of 10 MHz to 40 GHz
- Built-in Spectrum Analyzer, VNA and O-Scope
- Scalable modular architecture
- Remote Operation via IEEE 488.2 (SCPI)



## **TEXTRON** Systems

# **SASI 240**

#### SASI 240 SPECIFICATIONS

Textron Systems' SASI 240 is the ideal RF measurement instrument for ATE or lab applications. SASI offers dual-channel measurements with industry leading accuracy and measurement time at an affordable price, in a compact 3U, 19" rack-mounted footprint.

#### FEATURES AND SPECIFICATIONS

A detailed specification is available on request

#### FREQUENCY MEASUREMENT PERFORMANCE

- Modulation Measurement:
  - Peak deviation 500 KHz 400 MHz ±20% at 6 dBc
  - Modulation rate 100 Hz to 10 MHz (@ 8 Hz resolution bandwidth)
- DC Coupled Range: 0.0 20 MHz, CW & Pulsed
- AC Coupled Range: 0.01 40.0 GHz, CW & Pulsed
- Resolution Bandwidth Range: 1 Hz 10 MHz
- Frequency Accuracy:
  - $\pm$  2 x 10-7 x measured frequency (derived from master clock jitter)
- Pulse Width: 40 nS to CW
- Duty Cycle: 0.1 to 99.9%, CW
- Spurious Response: Proprietary spurious rejection processing eliminates all spurs to the noise floor.
- Typical Input VSWR: ≤ 2:1 (referenced to 50Ω) for all frequencies ≤ 18 GHz when input attenuator is ≥ 10dB
- Channel-to-Channel Isolation: ≥ 60 dB

#### POWER PERFORMANCE CHARACTERISTICS

- Power range:
  - +18.5 to -100 dBm over 3 MHz to 20 GHz
  - +5 to -100 dBm over 20 to 40 GHz
- Power resolution: 0.02dB
- Power sweep range: 40 dB max (+10 to -30 dBm)
- Trigger Capability:
  - 2 TTL Trigger Inputs 50Ω impedance BNC connector
  - 8-Channel MLVDS Wire Interface Trigger Bus conforms to TIA/EIA-899 Molex 83614-9016 Connector
  - Provisions for two programmable internal trigger sources

#### IF OUTPUTS

- Frequency Range: 321.4 MHz (60 MHz Bandwidth) with input freq. >100 MHz
- Output Power: -5 dBm (nominal) with  $\geq$  -40 dBm input
  - Max output +15 dBm in  $50\Omega$  load

#### PHYSICAL CHARACTERISTICS

- Height: 3U (5")
- Width: Standard 19" rack-mount configuration
- Depth: 25"
- Weight: 37.5 pounds
- Prime Power: 100-240 VAC 50/60 Hz
- Power Draw:
  - 132W @ idle
  - 170W (max) during simultaneous 2-channel measurements

#### VIDEO OUTPUT

- Pulse Rise Time: 20 ns (10% to 90%)
- Pulse Fall Time: 40 ns (90% to 10%)
- Settling Time: 40 ns

#### INPUT/OUTPUT CONNECTORS

- 2, USB 3.0 Ports
- Ethernet I/O
- HDMI Port for direct video output
- 2.92 mm jack RF input connector:
  - 10 MHz to 40 GHz
- SMA jack reference input connector:
  - DC to 20 MHz
- BNC jack reference input connector:
  - 10 MHz reference input signal

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