

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

V346 32-MHz arbitrary waveform generator with modulation

HIGHLAND TECHNOLOGY

Features



- 8 channels of independently programmable sine, sawtooth, triangle, and square/PWM/pulse, Gaussian noise, and arbitrary waveform generation
- Channel-channel modulation: AM, FM, PM, PWM, and channel summing
- Output range 0 to 32 MHz with sub-millihertz resolution
- DC coupled 50-ohm outputs to 10.24 volts peak-to-peak
- Channel/board sync provisions allow generation of polyphase or synchronized waveforms, across unlimited channels
- Bandlimited Gaussian noise generation allows direct noise output, modulation, noise floor summing, and calibrated jitter
- PWM facility generates precision digital outputs for motion control or optical encoder simulation
- External TTL controlled channel updates and resets simplify system integration
- Includes built-in self-test (BIST) and channel test connector
- Clean, easy-to-program architecture

The V346 provides eight independent digitally synthesized waveform outputs, each programmable for frequency, amplitude, and phase.

Channel-channel modulation, summing, synchronization, and noise generation allow complex coordinated waveform generation within one module or across multiple modules. Hundreds or thousands of channels may be exactly synchronized through local electrical or remote fiberoptic links. Any output may be switched to a front-panel test connector, allowing in-crate calibration check without removing field cables.

The signal-processing capability of the V346 is sufficiently general that a wide range of complex functions can be easily programmed from the "first principles" of signal/systems theory. This includes quadrature signal generation, DSB/SSB of arbitrary waveforms, sweeps and chirps, QAM/constellation generation, frequency hopping, FSK generation, multichannel frequency tracking, and quantitative control of noise and jitter.

One or more V346 modules may also be used to simulate complex, high-channel-count processes, such as radar and sonar arrays, complex rotating machinery and structural systems, diesel/jet engine simulation, stationary and aircraft AC power systems, thyristor/IGBT phase control, and many others.

The T346, a compact stand-alone, non-VME, RS-232/Ethernet controlled version of the V346, is also available for embedded applications.

18 Otis Street San Francisco, CA www.HighlandTechnology.com tel: 415 551-1700 fax: 415 551-5129

Specifications: V346 32-MHz arbitrary waveform generator with modulation

FUNCTION	8-channel VME 32 MHz arbitrary waveform generator
DEVICE TYPE	16-bit VME register-based slave: A24:A16:D16 Implements 256 16-bit registers at switch selectable addresses in the VME 16 or 24 bit addressing spaces
STANDARD WAVEFORMS	Sine, sawtooth, triangle, Gaussian noise, or square/pulse/PWM outputs
ARBITRARY WAVEFORM	4096 point, 16 bit user-loadable arbitrary waveform with programmable hardware interpolation
SIGNAL SWING	Normal range: ±5.12 V ±1% Attenuated range: ±1.024 V ±1%
DC OFFSET	±2 mV typ, 15-35°C ±10 mV max, 0-60°C
GAIN ERROR	±0.5 % max
FLATNESS	-0.1 dB @ 12 MHz typical -1 dB @ 32 MHz typical -3 dB @ 46 MHz typical Amplitude rolls off monotonically with frequency
FREQUENCY RANGES	High range: 0 to 32 MHz with 0.0149 Hz resolution Mid range: 0 to 4 MHz with 0.0018 Hz resolution Low range: 0 to 250 KHz with 116 µHz resolution
GAUSSIAN NOISE	Programmable amplitude 0 to 1 V RMS, programmable 3 dB bandwidth 0 to 2 MHz
SUMMING	Any channel may be summed with the output of channel 1 to 7, cascadable in any groupings Sums may be modulation sources
MODULATION	Any channel may be amplitude, frequency, phase, or PWM modulated by the outputs of channels 1 to 7, in any combination
SYNC OUTPUTS	0 to 5 V square wave; ±24 mA max
TTL COMMAND	Programmable edge sensitive input
TTL RESET	Programmable level sensitive input
OPERATING TEMPERATURE	0 to 60°C; extended MIL/COTS ranges available
CALIBRATION INTERVAL	One year
POWER	Standard VME supplies: +5 V, 1.5 A max +12 V, 750 mA max -12 V, 750 mA max
CONNECTORS	SMB jacks for channel/test outputs, clock input, and SYS bus (SMA and LEMO connectors available by special order) 50-pin SCSI-type female for AUX outputs
PACKAGING	6U single-wide VME module
CONFORMANCE	ANSI/VITA 1-1994 (R2002) VMEbus spec; does not support byte writes

18 Otis Street San Francisco, CA www.HighlandTechnology.com tel: 415 551-1700 fax: 415 551-5129

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP